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~~REALISM~~ A CRITICAL SURVEY

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KANT'S TREATMENT OF CAUSALITY IN
THE MORALITY OF PUNISHMENT

IDEALISM

A CRITICAL SURVEY

by

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PREFACE

THE purpose of this book is made as plain as I can make it in the introductory chapter. It will surely be clear in any case that an attempt to assess the contribution to philosophy of the idealist school by one who is not a member of this school but yet in deep sympathy with it constitutes on principle an enterprise which is worth undertaking and as the course of the book will show is by no means irrelevant to modern controversies. Whether it has proved its worth undertaking in practice as well as in principle is for my readers to judge. When I try to reach philosophical conclusions of my own through a critical examination of idealism I do in this book I find myself led in a direction which is in sharp opposition to the strongest philosophical influences of the present day but in philosophy at least the only way to salvation is through thinking for oneself undeterred by authority so I have not hesitated to criticize my betters nor do I regard this divergence as wholly a disadvantage nor is it the less and not the more popular views that most need sympathetic exposition since the errors of the latter are more likely to consist just in overlooking the element of truth contained in the former while there is from the nature of the case a little danger that people will overlook what truth is contained in the latter.

I am under a deep obligation in particular to Professor G. E. Moore and Mr. H. H. Price both because of what I have learnt from them in oral discussion on many occasions and for the really great sacrifice of well earned leisure which they have made in order to read and comment in much detail on the large portions of my book which I submitted to them. Their criticism was rendered all the more valuable by the fact that there was and still I fear is a very serious divergence between some of the views presented here and views held by Professor Moore at least. I also tender my heartfelt thanks to Professor W. R. Sorley, Professor N. Kemp Smith and

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Messrs H B Acton R R Brathwaite J D Mabbott and J O Wisdom for having read and very helpfully commented on shorter portions of the book which I submitted to their consideration I am indebted to the editors of *Mind* and of *The Proceedings of the Aristotelian Society* for permission to make use in a more or less revised form of articles published in these periodicals Last but not least I have to thank my father and mother for having relieved me of the most tedious part of the work involved in the production of the book namely that of proof reading

A C EWING

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CONTENTS

CHAP	PAGE
I INTRODUCTORY	I
II EPISTEMOLOGICAL IDEALISM	II
§ I THE MAIN EPISTEMOLOGICAL ARGUMENT FOR IDEALISM	II
§ II THE ARGUMENT FROM MENTAL CONSTRUCTION	23
§ III IS THE OBJECT OF KNOWLEDGE INDEPENDENT OF BEING KNOWN? THE REALIST EPISTEMOLOGY	30
§ IV THE EPISTEMOLOGICAL ARGUMENT FROM INTERNAL RELATIONS	43
• § V ROYCE'S ARGUMENT	49
§ VI A CONCESSION TO IDEALISM	56
• § VII HEGELIANISM AND EPISTEMOLOGICAL IDEALISM	59
III KANTIAN IDEALISM	63
§ I INTRODUCTORY	63
§ II KANT'S SOLUTION OF THE PROBLEM OF SYNTHETIC <i>A PRIORI</i> KNOWLEDGE WHY KANT WAS AN IDEALIST	64
§ III ARE SPACE AND TIME MERELY APPEARANCES?	84
§ IV KANT'S ATTEMPT TO ESTABLISH EMPIRICAL REALISM WITHIN IDEALISM	93
§ V THE THING IN ITSELF	101
§ VI KANT'S CHIEF CONTRIBUTIONS TO THE IDEALIST MOVEMENT	111
IV THE THEORY OF INTERNAL RELATIONS	117
§ I AN ANALYSIS OF INTERNAL AND EXTERNAL	117
§ II VARIOUS IDEALIST ARGUMENTS FOR THE THEORY OF INTERNAL RELATIONS	142
§ III CAUSALITY AND THE PROBLEM OF INTERNAL RELATIONS	151
§ IV CONCLUSIONS	187

V	THE COHERENCE THEORY	105
	§ I THE OBJECTIONS TO THE COHERENCE THEORY	107
	§ II DEGREES OF TRUTH	118
	§ III COHERENCE AS AN ACCOUNT OF THE NATURE OF THE WORLD	128
	§ IV COHERENCE AS THE CRITERION OF TRUTH	231
	§ V RATIONALISM : EMPIRICISM	50
VI	IDEALISM AND THE THEORY OF PERCEPTION	261
	§ I INTRODUCTORY EXPLANATION OF TERMS	61
	§ II DIFFERENT SENSES OF DIRECT AWARENESS AND THEIR PHILOSOPHICAL SIGNIFICANCE	254
	§ III THE REPRESENTATIVE THE THEORY OF PERCEPTION	73
VII	PHYSICAL OBJECTS	270
	§ I THE ARGUMENT FROM COMMON SENSE AND THE ANALYSIS OF PROPOSITIONS ABOUT PHYSICAL OBJECTS	290
	§ II IS THERE ANY JUSTIFICATION FOR THE BELIEF IN INDEPENDENT PHYSICAL OBJECTS	316
	§ III THE NATURE OF PHYSICAL OBJECTS	355
VIII	IDEALIST METAPHYSICS	383
	§ I THEISTIC IDEALISM	383
	§ II DOES MATERIAL IMPLY AN EXPERIENCE FOR WHICH IT EXISTS	395
	§ III THE ABSOLUTE	403
	§ IV PANPSYCHISM	410
	§ V THE ARGUMENT FROM UNIVERSALS AND MORAL VALUES	419
	§ VI IDEALISM AND VALUES	427
	SUMMARY OF MAIN CONCLUSIONS	430
	INDEX	443

IDEALISM · A CRITICAL SURVEY

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CHAPTER I

INTRODUCTORY

THIS work is not a history and does not seek to compete with any histories of idealism. It is an attempt to reach an independent conclusion on certain philosophical problems by means of criticism of what others have said. Its subject does not require apology however much the treatment of it may since whatever our sympathies there is no doubt that historically the most influential movement in modern philosophy has been that known by the name of idealism. The time has perhaps arrived when one may hope better to evaluate the rights and wrongs of this great movement than would have been possible either when its dominance was comparatively speaking unquestioned or when it was confessedly the centre of the chief philosophical controversy of the day. The need for such an evaluation of idealism is all the greater because so many prominent philosophers of other schools now seem to think that there is nothing to be learnt from it and despise and ignore it in a way which of itself suggests to a discreet observer that the reaction may have gone too far. Such philosophers must themselves realise that it is most unlikely that the school which dominated thought in this country for so long and still numbers so many adherents has nothing to give that its opponents have overlooked, and it is at least worth inquiring whether this is so. There are two reasons which in the light of my personal views seem to me to make such an inquiry especially pertinent at the present time. The first is that what started twenty-five or thirty years ago as a well justified realist reaction at Cambridge seems like most reactions to have gone too far and to suffer just through overlooking that side of the truth which the absolute idealists whom it first attacked brought out while bringing out admirably the side which they overlooked.

The second is that in spite of all this many philosophers including some who are generally associated with the left wing of that very movement of which I have just spoken have now relapsed into what I consider the chief idealist error namely that of refusing to separate the esse of a physical object from its *percepti*. But there is a further reason independent of my personal views it is that at the present time there is great danger of the philosophers of this country falling asunder into two groups who do not understand each other's language and are quite incapable of appreciating each other's arguments namely the so called Cambridge school on the one hand and on the other the school more in sympathy with what might be named the classical rationalist tradition in philosophy. Since I think on the whole that the former argues better but that the latter arrives at wiser conclusions it seems to me very important that some of the contentions of the latter should be restated more clearly than was possible before the former had done its work of criticism. Perhaps the fact that I am not definitely a member of either the one party or the other may increase my chances of making some slight contribution in this direction that will be of help to the more moderate members of both.

The term idealism has been used in many different senses but nevertheless there is a school—or better several schools—of philosophy to which the name would be universally applied. It would be generally agreed that Berkeley, Kant, Fichte, Schopenhauer, Lotze, T. H. Green, Bradley, McTaggart, Croce and Gentile for instance however much they differ among themselves, can all reasonably be described as 'idealists'. This is not to say that the definition of the term idealism in its philosophical sense is an easy matter or one about which there is general agreement. Professor Kemp Smith defines the term as covering all those philosophies which agree in maintaining that spiritual values have a determining voice in the ordering of the universe¹ and there is much to be said for the view that it would have been more satisfactory if the term had been generally used in some such way as this. But, if we were to use it

¹ *Prolegomena to an Idealist Theory of Knowledge* p. 1. The alternative position which he contrasts with idealism is called by him naturalism and defined as the view that these values emerge and begin to vindicate their reality only at some late stage in a process of evolution.

thus now, its denotation would be far wider than is usually the case for we should have to describe all believers in God as idealists (including most philosophers who lived before what is usually called the idealist movement began all Christian theologians and some of the advocates of philosophical realism¹)

At any rate what I wish to discuss in this book is not the view that spiritual values have a determining voice in the ordering of the universe but only a certain line of thought that has sometimes been used to support such a conclusion. For there are many arguments whether good or bad for theism which are not idealist in character in the sense in which that term has most commonly been employed e.g. the three traditional proofs of God criticised by Kant and most arguments based on ethics and on religious experience and there may also be non idealist arguments which support forms of the said view about values other than theism. There is certainly a narrower sense of idealism in common use among philosophers such that it is quite possible and usual to hold that the universe is in some way ordered or dominated by spiritual values without being an idealist. What this narrower sense is can be roughly indicated by saying that it is the one in which the philosophers enumerated above can all be said to be idealists. What have all these philosophers in common? They have in common the view that there can be no physical objects existing apart from some experience² and this might perhaps be taken as the definition of idealism provided we regard thinking as a part of experience and do not imply by experience passivity and provided we include under experience not only human experience but the so-called Absolute Experience or the experience of a God such as Berkeley postulates. By existence apart from

¹ E.g. Cook Wilson *Statement and Inference* vol II ad fin. On the other hand the term would not cover e.g. Schopenhauer.

² Cf. the definition given by Professor Watts Cunningham. Idealism is that philosophical doctrine which undertakes to show that in order to think matter or the spatio-temporal order of events in its ultimate nature we are logically compelled to think mind or spirit along with it as in some sense foundational to it. (*The Idealistic Argument in Recent British and American Philosophy* pp 338-9) I for some time hesitated whether to use mind or experience in my definition but decided in favour of the latter as more comprehensive and less vague. The definition quoted as well as mine also seems to require further reservations not given by its author to make clear the distinction between idealism and theism.

experience I mean existence¹ as unperceived. If we took as our definition of idealism the view that nothing can exist apart from experience we should exclude Kant but we do not if we take as our definition the view that no physical thing can understanding physical thing to cover objects like stones chairs tables etc. for whatever we mean by these words we certainly do not as Kant recognised mean by them unknown things in themselves. Further complications arise because anyone who believes in a God that created the world must believe that physical things could not exist apart from God unless he supposes that God merely created them in the beginning and that they can now go on just as well without God like a watch which had been wound up once for all and if he as is most usual also supposes God to be omniscient he must suppose that physical things could not exist apart from a mind which knows them and to which they are therefore in some way present.² Yet it is certainly not customary to call all who believe in this idealists. The point of difference is that while others would be led to this conclusion indirectly, if at all the idealist holds that the nature of physical things in the only sense in which he will admit their existence directly involves this relation to experience so that their existence is logically inconceivable apart from experience. Idealism as thus used will cover alike views which proceed from this premiss to the conclusion that physical objects depend on God or the Absolute or are themselves psychical in character and views which are content with making them abstractions from collective human experience.

It must be admitted however, that even now our definition is not at all precise and cannot be so at least till a precise definition of 'physical object' be given a very difficult task. The reader knows the sort of thing meant by the latter term, he knows what trees stones mountains tables, etc. are like, and therefore he can understand what kind of view I mean to cover by my definition of idealism, but to frame a formula which would include all the shades of opinion that have, more

¹ There is a further complication as to the meaning of existence (v below p 298) I am using the term in a primary literal sense and not in a sense in which A exists means merely that anybody who e.g. looked in a certain direction under certain conditions would see A.

² He might hesitate to speak of the 'experience' of God because the word suggests a certain passivity and dependence on sense data not usually attributed to God.

often than not been described as idealist and exclude all those that have been, more often than not described as realist is almost or quite beyond human capacity. For instance while my definition seems to me fairly easily applicable in distinguishing the philosophies of the past since Berkeley there are certain philosophers of the present day who hold views about physical objects covered by it and yet would resent and would not in practice usually be given the title of idealist because they are so much out of sympathy with other tendencies associated with the school. But then is it ever possible to define a movement adequately by a short formula which is quite unambiguous and precise? My view is that the term will soon die out except as a name for a past movement since most philosophers of the present day seem to feel that it is better not to label themselves expressly as idealists or realists while they still draw on the resources of either or, better both schools.

The idealist may hold the view about physical things indicated either (a) because of a general theory of knowledge which implies that no object can exist apart from a knowing mind or (b) because he holds that the particular characteristics of matter logically imply an experiencing or thinking mind, or (c) because he holds that physical objects while not implying a mind on which they depend are themselves of the nature of experience or are psychical entities of some kind. The first type of argument is discussed mainly in Chapter II the last two in Chapter VIII. One of the reasons urged for the first view is a certain theory of relations the doctrine of internal relations, which is specially associated with the idealist movement and should lead to very important metaphysical conclusions if it is true and this theory necessitates a special discussion in Chapter IV. Further, the form of idealism maintained by Kant seems to require discussion in a separate chapter as does the so called coherence theory. However among the chief arguments used by idealists have been negative ones based on our supposed inability to justify the belief in physical objects realistically conceived and consequently though it is not quite clear whether the term idealist as ordinarily understood in philosophy covers anyone who merely denies that we can defend the belief in unexperienced physical objects without asserting that such things are logically impossible these negative arguments bulk so largely in the idealist controversy that a discussion of them is absolutely essential. This brings

us to the theory of perception and the question in what sense we are justified in asserting the existence of physical things.

It seems to me that all these topics have a certain unity and are not only definitely associated with the great idealist movement of the last century but are appropriately discussed under the heading of idealism. But if anyone thinks that I have used the term improperly this is only a matter of words. I have a right to choose these topics for discussion if I wish and the title is quite a minor consideration. It may be that some would have preferred me to speak of mentalism or subjectivism rather than idealism but there is one fatal objection to this course. Mentalism and subjectivism have been employed almost entirely as a kind of terms of abuse and consequently to call any theory by these names is to set most people against the theory at the start. Thus I wish to avoid at all costs the theories I am discussing may be quite untenable but they have at any rate been held by many thinkers of the highest distinction and have constituted one of the most important currents in modern thought. This being so it is incredible that they can be mere folly and this book is an attempt to separate the good and evil in them. Fairness is the quality most essential to the critic and it would be hindered by the mere application of such a title. Besides I wish to discuss some topics such as the coherence theory which certainly could not be brought under these terms. Many people will also feel a not unjustifiable objection to the use of labels in philosophy but after all we are speaking of a distinctive school with a great deal in common and if he likes the reader may simply regard the term idealism as shorthand for the belief that physical objects cannot exist apart from some experience or mind. In practice I have found the term extremely useful merely as shorthand to avoid such cumbrous expressions.

It is important for the reader to be clear that the rejection of the type of view under discussion in this book would not necessarily imply the adoption of what is usually called naturalism or even the denial of the dominance of mind or spirit in the real world provided one allowed a secondary, though perhaps dependent reality to matter. Even if idealism is rejected three alternatives remain open and I shall not attempt to judge between them. (a) The naturalist view may be adopted as the more likely, and it may be held that mind is a mere product or even a mere quality of matter. (b) An

agnostic view may be taken and the problem of the ultimate relation of mind and matter dismissed as one which at least at present is quite beyond our power of solution (c) That mind or spirit is dominant in reality may be held for reasons other than those discussed under the heading of Idealism. In particular while idealism has very commonly, though not always been associated with and used in defence of what may for short be called a religious view of the world the rejection of idealism must not be understood necessarily to involve the rejection of such a view. It may well be the case as is very often held that while the belief in God or in the dominance of values cannot be established by argument there is a mode of cognition not mainly dependent on inference associated with religious experience which provides adequate justification for such a view but even as regards philosophical arguments for theism and against naturalism the greater number whether valid or invalid would at any rate be unaffected by the rejection of idealism. Certainly of those who have held such religious beliefs the vast majority including all philosophers prior to Berkeley and most theologians and many philosophers afterwards have not held them for reasons dependent on idealism in the philosophical sense.

As I have said already this book is not intended to be a historical account of idealism but a criticism of it and an attempt to discover how far any of the distinctive doctrines specially associated with this name are tenable. No attempt has been made to complete it by including all the chief historical figures of the idealist school and as will be seen the order of the chapters ignores chronology altogether. I am trying to consider certain arguments and determine their validity or otherwise, not to describe how the theories in question developed or to act as interpreter of particular thinkers except as a means of fulfilling my main purpose.

One serious omission may be charged against me namely my neglect of Hegel. For this the justification is twofold. In the first place it is doubtful whether Hegel was or was not an idealist in the sense in which I am using the term and if and in so far as he was the views held by him are better discussed as they occur in other philosophers who have stated them less obscurely. Secondly it would be quite impossible to deal with Hegel without introducing a long and difficult discussion of the different possible interpretations

of his work thus overloading my book with historical controversy and exegesis. My object throughout is not to decide what different thinkers meant as an end in itself but to work out my own conclusions regarding the strength and weakness of the case for a certain type of view and to seek to determine what view others held only as a means to the full intent of this end. But to do so in the case of Hegel would involve so long a discussion that we should lose sight of the end in the means and should probably also attain no decisive result after all our trouble. Hegel was one of the greatest of philosophers but his greatness did not lie in his idealism even if he was an idealist. Similar reasons excuse me from discussing phenomenology.

The twentieth century has seen a violent and widespread reaction against the idealism of the later nineteenth and with this reaction I have much sympathy. Its leaders have in particular rendered three services of inestimable value to philosophy. In the first place they have shown up the true nature of cognition as something much more akin to finding than to making and refuted the misconceptions and dogmatic assumptions which prevent philosophers from seeing this clear truth. Secondly they have shown that the theory of a physical world existing independently of any experience while incapable of strict proof and still open to many difficulties is at least reasonably arguable by philosophers and in doing so have effectively discussed many problems such as those covered by the theory of perception which idealists had high-handedly dismissed as settled without adequate detailed consideration or in their haste to reach conclusions about the whole of reality completely ignored through lack of interest. But the third service is of even more importance: they have insisted on the need for clear statement and careful analysis and by setting a new standard in this respect have shown how gravely even the greatest philosophers of the past and in particular the leading idealists have fallen short here of what could reasonably be expected. But this is not to say that they and the representatives of the new logic generally have learnt all the lessons taught by these idealists. And admiration for the skill in analysis shown by members of this new school of thought certainly need not imply agreement with their philosophical outlook or with the view expressed by some of the more daring of them that philosophy consists solely in the analysis of the meaning of common sense.

statements There is no reason why a philosopher might not have the clarity and precision of the logical analysts without their philosophy

There seems to be besides the difference in views a difference in temperament and in style between idealists and realists such as to prove an almost insuperable bar to mutual understanding and appreciation We must recognise that there is at least some excuse for Professor Broad's remark that the writings of too many eminent Absolutists seem to start from no discoverable premises to proceed by means of puns metaphors and ambiguities and to resemble in their literary style glue thickened with sawdust ¹ but I must add that even when the style of an absolute idealist seems most troubled by obscurity and confusion I am often subject to an uneasy feeling that this is partly due to my own failure to see something extremely well worth seeing which he sees dimly and so describes obscurely but which his critics do not see at all It is a grave fault in a philosopher to be content with a confused account where he could give a clear one but it is also a fault to dismiss either a rival philosopher's contentions or a particular conception as not worth consideration because they are incapable of really clear statement ² Owing to the weakness of human intelligence and the defects of human language it may well be the case that none of the points most worth considering in philosophy are capable of being grasped with anything like complete clearness or stated with anything like complete precision at present and to give our philosophy clearness and precision at the expense of excluding from consideration or even dogmatically denying whatever we cannot make clear and precise may be to render our work worse for this and not better than the work of those who see something beyond our ken and do not because the task can only be partially fulfilled shrink from trying to communicate and justify their vision Did not one of the ablest representatives of the new logic himself say — The chief danger to our philosophy apart from laziness and woolliness is *scholasticism* the essence of which is treating what is vague as if it were precise and trying to fit it into an exact logical category ³ On the other hand I am certainly not

¹ *Examination of McTaggart's Philosophy* vol I p li Dr McTaggart he insists is not himself in the least subject to these deficiencies

² I do not mean to suggest that Professor Broad is guilty of this fault

³ Ramsey *Foundations of Mathematics and Other Essays* p 269

prepared to admit that idealists have usually done the utmost possible to make what did not admit of complete precision at least as precise as possible or even if it approached this ideal

CHAPTER II

EPISTEMOLOGICAL IDEALISM ¹

§ I THE MAIN EPISTEMOLOGICAL ARGUMENT FOR IDEALISM

THE present chapter is intended to deal with those idealist arguments which are based on the theory of knowledge and not on the more specific problem of the physical world. It does not therefore include any arguments derived from the characteristics or supposed characteristics of physical objects or from the theory of perception and the difficulties which must be faced by any attempt to give a consistent account of the physical world on realist lines or to provide reasons based on the facts of perception adequate to justify our belief in such a world. It only includes those arguments which are based on the nature of cognition as such. Nor does it discuss the doctrines of any famous idealist thinkers in general but rather an isolated set of arguments some of which are used in one form or other by most philosophical idealists. In practice the arguments in question have almost always been supplemented by others drawn from different sources and no doubt if my object were to write a history I should adopt a different scheme of arrangement altogether. But since my purpose is not to give an account of the historical development of idealism but to evaluate idealist arguments little will be gained and a great deal may be lost by mingling arguments with a different logical basis. In my opinion idealist writers have often committed the error of confusing reasoning based on epistemology with reasoning arising out of the particular problems of perception and the physical world.

¹ This chapter deals with theories which are in most quarters now considered to be out of date and perhaps also obviously absurd but it is necessary because the theories have played such a large part in idealist thought. But in my opinion the chapter is the duller of the book and therefore it is perhaps only fair to warn readers that if so inclined they can omit it without very grave harm to the understanding of what follows.

Further I am dealing in this chapter not with the agnostic form of idealism held by Kant though this was based partly on epistemological considerations since it is more convenient to handle this famous doctrine in chapter by itself but with the form of idealism which maintains that it has reached a positive conclusion as to the nature of reality. Such doctrine has a short way with the thing in itself. If we are to form any idea of the thing in itself whatever if we are to think it at all even as an unknown we must bring it into relation to mind therefore it is urged we cannot assert its existence except in relation to mind. And so according to many thinkers the mere fact of knowledge and thought proves that nothing is conceivable and therefore nothing can exist unless it is the object of a knowing and thinking mind.

Fortunately a number of the arguments of this type can be treated together since they involve a common fallacy and lead to a common dilemma. When Berkeley wishes to clinch the question he asks his opponent to try to imagine a single physical object existing outside the mind and then points out that in the very act of imagining it he is thinking of it as perceived by himself and therefore as relative to his own mind. To quote from the dialogue between Hylas and Philonous:¹

Philonous (To pass by all that hath been hitherto said and reckon it for nothing, if you will have it so) I am content to put the whole upon this issue. If you can conceive it possible for any mixture or combination of qualities or any sensible object whatever to exist without the mind then I will grant it actually to be so.

Hylas If it comes to that the point will soon be decided. What more easy than to conceive a tree or house existing by itself independent of and unperceived by any mind whatsoever? I do at this present time conceive them existing after that manner.

Philonous How say you Hylas can you see a thing which is at the same time unseen?

Hylas No that were a contradiction.

Philonous Is it not as great a contradiction to talk of *conceiving* a thing which is *unconceived*?

Hylas It is.

Philonous The tree or house therefore which you think of is conceived by you.

Hylas How should it be otherwise?

Philonous And what is conceived is surely in the mind.

Hylas Without question that which is conceived is in the mind.

¹ Everyman edition p. 232

Similarly the modern idealist Signor Gentile says that Berkeley is right in holding that

Reality is conceivable only in so far as the reality conceived is in relation to the activity which conceives it and in that relation it is not only a possible object of knowledge it is a present and actual one. To conceive a reality is to conceive at the same time and as one with it the mind in which that reality is represented and therefore the conception of a material reality is absurd.¹

Similar views are maintained by Signor Croce

It is easy to object to Berkeley that the fact that something which is seen or conceived by me cannot exist unseen or unconceived at the time I see or conceive it does not prove that it could not have existed unseen or unconceived *before* I saw or conceived it but the reason why the argument carried conviction was obviously because Berkeley thought of conception as implying that the object conceived was in the mind and therefore could not be external to the conceiver. Similarly Signor Gentile is maintaining that the reality conceived is inseparable from and logically implies the act of conceiving it. Other arguments leading to a similar conclusion are that knowing is a kind of mental construction or at least involves such construction (constructing) this being taken to imply that we make the objects we know that object and subject are essentially relative to each other and therefore cannot be separated that what we know must fall within consciousness and cannot be conceived as existing outside it that I can only know objects by means of my own ideas and therefore cannot go beyond ideas.

In discussing this type of argument philosophers fall into two very sharply divided camps to one their truth seems self evident to the other they appear mere trivial verbal fallacies. We may certainly concede at least that their plausibility has been very much increased by verbal fallacies. Berkeley may be charged with having confused two different usages of the word conceive. We may be said to conceive thoughts and in that case what we conceive is in our mind if anything can be said to be so but we can in conformity with the ordinary use of language, also say conceive that where the that clause stands for a fact a truth a reality as opposed to our thoughts of this reality. When used in that sense the object of the verb bears a relation to the conceiving quite different from that

¹*Theory of Mind as Pure Act* trl by Wildon Carr p 1

which it does in the first instance. In the one case it stands for the same thing as the conceiving regarded from a different point of view and so made a substantive instead of a verb; in the other case it is regarded as something objective.

Likewise 'concept' is sometimes used to stand for a thought or belief and sometimes though loosely for a reality or feature of reality. A similar ambiguity may be traced in words like relate which one would expect to mean 'put into relation' by changing the relative position of objects but which usually means 'recognise as already related'. Again knowledge, perception, sensation, imagination may all stand either for the knowing, perceiving, etc. or for what is known, perceived, sensed, and it is easy to fall into the error of asserting that because they stand for something mental when used in the first sense they also stand for something mental when used in the second. Berkeley is not the only philosopher the apparent force of whose arguments has been much increased by these verbal ambiguities.

The phrase 'in the mind' also has a double or rather a threefold meaning. It may mean either (1) a part of our mental process or (2) dependent on the mind or (3) apprehended by the mind¹ and we cannot possibly argue that because everything we know is 'in our mind' in the third sense at the time we know it it is therefore 'in our mind' in either of the first two (and similarly with the phrase 'in consciousness'). The ambiguity as has often been pointed out is rendered worse by an inadequate spatial metaphor.

Further the idealist case acquires a fictitious strength from the fact that the word object implies subject as its correlative. But it does not follow that whatever is the object of thought cannot exist without a thinking subject. It only follows that it cannot be *an object* without a thinking subject. No author would argue that he had saved his readers' lives on the ground that without him as author they could not have existed as readers of his book. True without a subject nothing could acquire the relational characteristic of being object, just as nobody could be a reader of this book if I had not written it, but the thing might for anything this argument proves to the contrary still have all the other qualities that we now ascribe to it.

Again I obviously cannot know that S is or was P without my knowing it if the last words are taken as qualifying the

¹ Cf. the colloquial phrase 'I will keep this in mind'.

main verb know to say I can is self contradictory But if without my knowing it is taken with S is P in the subordinate clause the contradiction disappears altogether It has been held in general that the idealist argument rests on a confusion between the truism that I cannot know (or think) anything to exist without its being known (or thought) by me and the falsehood that it cannot exist without being known (or thought) by me If I know X X obviously must be in relation to my mind at the time I know it and again at any other time also it must bear the relation to my mind of going to be known by me¹ after such and such a lapse of time or having been known by me so many hours months or years ago but it does not follow that the relation is essential to X or that X could not exist without being in that relation

The idealist would retort that the mere attempt to think X as being out of relation to mind would bring it into relation to my mind and therefore only serve to establish his case However if we consider what the relation is the difficulty seems to diminish The relation in which X stands to me is not being known by me all the time but such as to be known by me at some particular time, and therefore the argument does not prove e.g. that matter could not exist independently of mind² I could not know (or form an opinion concerning) any fact about a material object unless the object were such as to allow me to know (or form the opinion about) the fact at some time in my life but for all that the fact might have been a fact long before I came to know it or think of it in any way whatever though I was in the future going to think about or know it Anything that is ever known must always have been such that it could eventually come to be known but it may nevertheless have gone through the greater part of its existence unknown or again it may be known consciously at times and then exist for a long period without anybody's being conscious of it at all It must indeed be admitted that any fact which ever comes to be known must be in that respect related to the knowing of it and the knower but this is saying very little for the relation may be altogether unimportant to

¹ Or at least of being capable of being known by me if the former wording is rejected as involving determinism

² We must remember however throughout that these arguments if valid at all, would apply not only to matter but to all objects of cognition.

the fact known. After all everything is related in some way to everything else but there could be no reciprocal rational action if we could not know. It is irrelevant most of these relations. The argument therefore is far from proving that whatever we know depends for its existence on our or some other mind's knowing it nor does it even prove that everything existent is knowable or known but only that everything known is known. It is however rendered not formidable by being combined with a certain theory of relations the so called internal theory but this view of relations and its bearing on the question will be discussed later.

But one reservation must be added to what I have just said. We can know some propositions of a formal type which are true of everything and consequently everything whatever whether we call it knowable or unknowable must be included in a class of things about which we can think as a class and of which we know some universal properties i.e. the class of all real things and in so far anything whatever is belonging to this class will be a member of a whole which is thought though very indefinitely and partially though very imperfectly known by us but there may still be very many things all the more specific properties of which are and will be forever unknown to mind. We cannot know everything about anything but we can know something about everything so that the term unknown becomes relative. Thus the opponents of the thing in itself were right when they said that no real thing could be absolutely unknown, only we must hasten to add that what we know of something may be very unimportant compared to what we do not know. Further knowledge is primarily of facts and only secondarily of things and of facts a great many still may be and, it would seem, obviously are quite unknown at least to human beings.

Nevertheless despite the obvious reply to it the epistemological argument for idealism still appears to retain its self evident character for many, and nothing that I have yet said is necessarily incompatible with the conclusions of such idealists but only with their attempts to prove them by reasoning. It may still be the case that there is a necessary connection between existence in any form and being known such that it is self-evident to those who understand these terms adequately that nothing can exist without being known although it is impossible to prove this by any series of steps to those who are lacking in the immediate insight required and although

actual attempts to prove it have been commonly vitiated by fallacies depending on verbal ambiguity

The most formidable objection to epistemological idealism is however to be found in the utterly impossible consequences to which it leads. For the same epistemological argument which is held to prove physical things to be dependent on us would prove equally that all human beings other than the person who asserts this doctrine and all facts about such beings were dependent on his knowledge or thought of them—that there is no past or at any rate that he cannot be justified in asserting the occurrence of any past events so that memory is a complete delusion or may be such for anything he can tell—that all the laws of logic are valid only when he thinks them and that he has no right whatever to affirm the truth of the very principles which led to his conclusion.

For if he holds any of the views mentioned above if he holds that cognition¹ is or involves the making of its object if he holds that he cannot transcend his own ideas if he holds that the object cognised must be dependent on or inseparable from the cognition of it so that it cannot have being or that he has no right to assert that it has except as and when cognised he must apply this not only to the physical world but to other human minds to past events to universal laws to the very principles which he has himself asserted.² If these characteristics or any of them are implied³ in the nature of cognition they must be asserted of all cases of cognition without exception. Now among any man's objects of cognition are other human beings therefore it would follow from the premisses

¹ I use the term cognition rather than knowing so as to cover both certain knowledge and justified opinion. The idealist certainly means his argument to apply not only to the former but to the latter also. For this use of the term of Stout *Studies in Philosophy and Psychology* p. 307.

² The attempt to escape these difficulties by a distinction between absolute and finite knowing will be discussed shortly.

³ In this book I never use imply in the sense invented by Mr Russell according to which p implies q means it is not the case that p is true and q is false—but in the sense in which the word was most commonly used by philosophers prior to the introduction of this new usage and is still used by them outside mathematical logic. In this sense p is said to imply q whenever it is possible to infer q from p either because it is logically entailed by p i.e. follows with logical necessity from p or because of some causal connection established by inductive evidence or because some other proposition or propositions (often not specified) are known or held to be true which when combined with p logically entail q .

that they must be merely ideas of his made by him incapable of existence except as and when thought by him or at least that he has no right to assert their existence as a *volens* is than this. Again among the objects of a present act of cognition by him are events in his past life therefore by the same argument these only exist as conceived by him now and never existed before (or at least he is not entitled to assert even as a probable opinion that they existed before). Thirdly the same applies to all universal laws. The laws of logic and mathematics he will have to admit only hold because he thinks them and when he thinks them. Finally he cannot even assert the validity of the idealist arguments themselves unless he assumes that they are valid independently of his thinking them and not merely because he thinks them. If their validity is inseparable from his thinking them they only hold now at the moment he thinks them and do not hold at all when he is not thinking them. If this reasoning is correct it follows that the epistemological arguments lead directly either to a complete scepticism as to everything beyond the individual's momentary experience or to a positive denial of its existence. The theory brought forward to explain cognition is now seen to make most cognition totally impossible.

Idealists often meet the argument concerning solipsism by rejoicing that all minds are really one and the same mind and that therefore to know others is only to know oneself. But this provides no real escape for even if the metaphysical doctrine about the unity of all minds be true the experiences of other human beings are at least separable from my act of cognising them just as my own past is separable from my present act of knowing it. The difficulty of solipsism arises because we do not have an immediate perception of any series of experiences except one which we call our own and the truth if indeed it be a truth that the different human minds are at bottom the same mind cannot alter this it cannot give us the immediate perception of others' experiences which we do not in fact possess. Whether what we call other minds are identical with our minds or not we cannot have knowledge or even right opinion about them without transcending our own present experience and thus transcending the form of idealism in question denies.

But the usual way of escape for the idealist from the difficulties mentioned is by the distinction between particular minds and Mind. Idealists issue the warning that what they

say about cognition only applies to Mind *qua* mind or to the universal Mind or to the Absolute on which all truth depends. By this means it is possible for them to hold that other human minds, the past, the universal laws I know, depend not on my coming to know them as an event in experience but on the universal Mind's knowing them. This answer may take two alternative forms according as the universal mind is regarded as immanent or transcendent. The former answer is on the whole the more popular among idealists but it seems to me the more difficult to defend. For if the universal mind is merely immanent it only knows in and through acts of knowing by finite minds and therefore the account given of its knowledge will apply to our own acts of knowing and thus be still subject to all the objections mentioned above. If knowing is making at all I make whatever I know including other human minds or the facts I know about them also past events and universal laws if the object of knowledge cannot be separated from the knowing of it then no particular fact which I know can be separated from my knowing of it and I therefore have no right to assert that it is a fact except as an object of my consciousness.

If however the universal mind is conceived as transcendent this difficulty is avoided because we need not then apply these extraordinary views to our knowing only to the knowing of the Absolute. Other human minds, past experiences, physical objects and universal laws may still be quite independent of my knowing though not of the knowing exercised by the Absolute. In this form idealism remains proof against the *reductio ad absurdum* I have just outlined but it has only avoided the attack directed on its consequences by sacrificing its premisses and leaving itself without any adequate foundation. The idealist epistemology is now not an assertion about our knowing but about the Absolute's knowing. But what basis it may be urged can we have for making assertions about the Absolute's knowing except our own knowing? For this is the only kind of knowing of which we have experience. But our own knowing as the idealist who takes up this position has already admitted clearly does not possess the characteristic of making its objects but rather presupposes the prior existence of the objects which it knows therefore we have no right at least on these grounds to ascribe such characteristics to the Absolute's knowing. If the Absolute's knowing is not analogous to our knowing we have no right to make any

positive assertions about its nature on the basis of its knowing. If it is antecedent to our knowing then it does not make or create the objects known although this does not rule out the possibility that they might still be created by Mind in some other capacity than as known as is felt by intuition. I cannot first assert that knowing makes its object that admit that this is incompatible with facts and so claim that Absolute knowing but not my knowing makes its object. If the first premiss is accepted my knowing makes its objects. If it is denied the argument disappears altogether.

It might indeed conceivably be possible to argue from what my knowing implied at its best to the nature of the Absolute's knowing though this was different in kind from my knowing, as it has been held that we can from imperfect human morality reach the notion of a perfection different in kind from our partial goodness. But then at its very best human cognition does not approach any closer to making its object than at its worst indeed much less close. In so far as it reaches truth at all it is always a finding of something independent of and other than itself. The goal of our knowledge is neither identity nor creation and the more its ideal is attained the more is it at variance with the creative character ascribed to the Absolute's knowing.

If the Absolute Mind is taken to be both immanent and transcendent either we must say that its knowing is creative in both cases and then we are impaled on the first horn of our dilemma or we must say that it is creative as transcendent but not creative as immanent and then there is a difference between its two modes of knowing so radical that they ought not both to be regarded as knowing and what is worse there can be no justification for an argument that its transcendent knowing must be creative if that argument is based as it claims to be on the characteristics of our knowing.

This argument is fatal to some but not by any means to all forms of epistemological idealism for epistemological idealism need not be based directly on the nature of our knowing. If it were based instead on the nature of all known or knowable objects and it could be shown by a consideration of their nature that it is impossible for them to exist without a mind which knows them, we might be able to prove an Absolute Mind by a method which would not be open to the objections in question. For in that case our premiss would be the nature of the objects known and not the nature of our knowing and

so the conclusion would not be inconsistent with the premisses. It would still be strange that the knowing of the Absolute Mind had this property while ours had not but on any view the Absolute Mind and absolute knowing must be very different from our minds and our knowing. Or the argument might have the effect of showing that they must be present to some consciousness in order to exist without implying that that consciousness (whether Absolute or finite) created them by *knowing* them. Such an argument might still be epistemological in that it proceeded by showing that they could not otherwise be known by us. It seems to be the type of argument employed by Caird and Green. We are not confined to our own ideas in that case but we can only know what is dependent on or inseparable from some consciousness not necessarily our own and this such thinkers seek to establish by epistemological arguments without supposing that we make the objects of our knowledge only that these objects must depend on some mind if they are to be known.

Can such an argument be drawn from the common characteristics of all known and knowable objects? It seems clear that all such objects must be thought by us in relation to a consciousness but that consciousness is our own and so far the argument would not seem to prove more than that any thing thought by us is when we think it related to our thinking an almost or quite tautologous conclusion. We may however I think go a little further than this and admit that we can only think an object existing independently of our consciousness by thinking it as it *would* be *if* it were present to a mind. For example if we are really to understand what is meant by talking of the state of the earth prior to man we must imagine some mind as contemplating it at the time when no human mind was in fact contemplating it and think it as it would have been for that mind. We can make correct verbal statements about it without doing this but this is the only way in which we can picture to ourselves what the statements really mean. Similarly I can only realise other facts by picturing them as they would be for a knowing mind.¹ It may even be contended that the only way in which I can think an *a priori* universal truth to be necessarily valid is by thinking it as such that any mind must necessarily accept it as true if it understands it.

¹ A similar argument may be applied to mental states and processes which I have not actually introspected.

A form of epistemological idealism may thus perhaps be justified as an *ad hoc* fiction. Even if matter has qualities of its own independently of all mind in order to think such independent qualities we must think them as they would be for an apprehending mind. This does not prove that they really exist only for such a mind but it seems obvious that it at any rate heightens whatever probability there be in the view that matter is dependent on mind unless such a view can be shown to be logically impossible which is clearly not the case. If we have as a matter of method to think physical objects as if they were for a knowing mind in order to determine their nature this seems likely to add to the probability that they always really are for a mind.

Philosophers eager to prove sweeping conclusions about reality have been apt in the past to despise a mere increase in probability but in the more sceptical atmosphere of the present day they can hardly afford to adopt this attitude. The extent to which this argument increases the probability of the conclusion in question will be very differently estimated by different men and will undoubtedly be held by many to be very small indeed. I myself would estimate it much higher if it were not for the fact that in taking the standpoint in question we always seem to ourselves at any rate to be taking it merely as a means of discovering what the thing or fact contemplated is apart from a knowing mind.¹ This may be a mistaken notion and the circumstance may easily be explained by saying that we must abstract from what the object is for any particular human mind but not from what the object is for some human mind or other but as far as I can tell the fiction seems to carry its instrumental character on its face. As we use it in ordinary life we are never led by it into thinking that physical objects really only exist when some mind, whether human or divine, is conscious of them. The case would be much stronger if we not only had to use this method in our thought but when using it always felt impelled to believe that idealism was true and had only progressed in knowledge by means of this belief but this is not so. The plain man seems perfectly well able to use this method without slipping into the view that matter only exists for consciousness.

But while the realist interpretation of the phenomenon

¹ If what I have said is true it is a self-defeating enterprise to try to discover apart from a knowing mind what the thing is but not to try 'to discover what the thing is apart from a knowing mind

seems to me more likely the idealist interpretation is also quite possible and this possibility strengthens whatever antecedent probability there may be in the view that matter depends on mind. If the Absolute Mind be regarded as transcendent this view is not incompatible with holding that physical objects are quite independent of our minds. Since it is not based on propositions about the creative or constructive character of our knowing it is not open to the objections usually urged against epistemological idealism. It may be the case however that the argument would be stronger if put in terms of experience than in terms of knowledge and stronger if based on the specific case of matter than if based on the nature of all knowable objects.

§ II THE ARGUMENT FROM MENTAL CONSTRUCTION

Perhaps the most valuable contribution of idealist epistemology is that it has called attention to the active character of our cognitive processes and the extent to which we use mental construction as a means to judgment. The active character of cognition has been stressed extremely by Sign Croce and Gentile. But all this active constructing may equally well be regarded as a way of putting ourselves in touch with something independent of our activity in construction and cognition. Not that I regard mental construction as a suitable title for the process in question. It is at the best a metaphor taken from our experience of making external objects and in several respects it conveys a misleading impression. We have to ask what it is that we make and when one answers concepts difficulties are at once raised by the ambiguous character of the word which bears at least three quite different meanings. (a) Sometimes it is used to mean universals but these are independent of our thinking them and are seen to be so in the very act of grasping their validity. (b) It may be used to mean propositions or groups of propositions about a common object.¹ Now if we conceive propositions as subsistent entities independent of our judging them we can still never be said to make propositions but if we deny such entities and treat propositions as elements in judgments² and supposals as I suggest elsewhere³ or at any rate regard

¹ I am inclined to think that this is the basic sense and that the word is only used in the other two senses given owing to confusions.

² I.e. judgments

³ V below pp 202-3

them is something that only *is* a being, is it a judgment? Suppose we can make a choice, and this would then be the ideal view of the facts. It is not a choice, but it would sound queer to speak of a judgment proper to being. Propositions are on another view of the nature of them in the full sense, but at any rate they are constructed by an act of mind on our part if, as I think likely, the first, natural, objective view of them is rejected. Or, we may mean by a concept the mental act of conceiving. It is some way there what conceiving itself means, but I imagine it includes both judging and (where the concept is a fiction) supposing.

We can now see that the ideology of physical things breaks down. For physical objects made by us continue to exist independently of us once they have been made. But this is not the case with concepts. For the word "concepts" stands either for something that is not made by us at all or for something that has being only in the very act by which we make it, if we can be said to make it. We must not fall into the old error of regarding concepts as a kind of things in the mind which copy real external things and though non-sensuous are otherwise parallel in character to images.¹ For the assumption of such entities there is no psychological or logical warrant at all. The act of judging or supposing constructs nothing other than itself and the characteristics of itself so that it is very difficult to see how we can legitimately even call it an act of construction. But in any case it seems clear that the evidence concerning the activity of our mind in cognition will not help the idealist case unless it can be shown that at the same time this activity involves a moulding or making of the object of knowledge and not merely of our concepts of it. To say that the two are inseparable presupposes that the idealist case has already been established.

It does however seem that if our judgments are the result of an elaborate mental process, we have travelled further from given reality than we are apt to think, and it may be objected that if we have gone through such a process we have no guarantee that its results are true of reality conceived as independent of us. We seem to have tampered with the data given to us and so with the evidence on which our beliefs ought logically to depend. This is perhaps the chief reason why Kant denied knowledge of reality,² but most modern thinkers who use the argument have employed it as a basis

¹ V below, ch III sect 2

not for agnosticism but for what Kant would have called 'dogmatic idealism'. If cognition either is or involves a process of this kind then it is thought we can only know what mind in us has made and must choose between an agnosticism according to which we can only know our own ideas and an idealism according to which all reality is constituted by the universal Mind which is partially manifested in our finite minds. To quote from an argument much in vogue if reality is given fact we can never know it because what we know is never pure fact without any admixture of theory is never taken just as it is given but if it is not mere given fact if it is so to speak, infected by theory and therefore by mind it is partly at least a mental construct and since we can never reach mere unquestioned fact unsystematised by thought we can never distinguish any element in reality as existing in the realist sense independent of a knower or thinker ¹

But the argument still breaks down before the distinction between the assertion that I come to apprehend the nature of an object ² by elaborate thought processes and the assertion that I make the object by the thought processes. As against the views generally attributed to the British empiricists (whether rightly or wrongly) it has been shown that we are active in cognition and never arrive at a fact merely by sensation or by passively receiving data but always understand it in terms of preconceived though not usually explicitly formulated theories but this, although it adds to the difficulty of arriving at the facts does not prove that we never arrive at them unless we assume that all theories are necessarily wrong. The argument may be valid against the views of some realists but not against all realism. Theories of knowledge may have to do better justice in the future to this characteristic of our cognitive processes than they have often done in the past but to say this is not necessarily to contradict realism, since the real may be apprehensible not only by sense but also by thought. We cannot it must be admitted apprehend the real without thought but the real need not for all that be itself dependent on thought.

There is indeed an ambiguity in the terms fact and theory

¹ V e.g. Bradley *Essays on Truth and Reality* p 108. Some Pragmatists also use this argument.

² Using object in the widest sense as a general term for whatever is cognised by us.

is said in these and similar argument. Fact should signify a reality as put before our eyes, but in conjunction with the adjective *primary* it signifies whatever reality is known in a primary way, given in sense without being reached by any less problematic process of inference. Theory on the other hand is a fact which does not like that appear primarily to reality but rather to our views about reality. Therefore if it is argued that because no facts we reach are apprehended as merely given we only know theories not facts or even facts related with theory the argument has acquired a subjectivist turn that is not warranted by the premisses. For it does not follow that because we can cognise no *primary* facts we therefore can cognise no facts at all but only theories.

It may still be asked how we can be justified in assuming that reality must necessarily conform to our thought but the question implies that in cognition we are primarily aware not of the laws of reality but of the laws of our thought. This is false. What we know primarily in knowing the law of non-contradiction for instance is not that we cannot think self-contradictions but that nothing can be self-contradictory. If knowledge is from the beginning an awareness of the reality about which we are thinking and not merely an awareness of how we think the question does not arise. When I see the necessity or even the probability of a conclusion what I see is not anything psychological a law of my mind, but a law of reality.

Idealists seem often to have been influenced by the assumption that knowledge involves identity between the knower and the known but if a process of cognition cannot transcend itself it becomes impossible even to know oneself. The cognition of a characteristic of myself is itself numerically different from the characteristic which I cognise and the cognition of a general law governing my mind is different from the law cognised, so that I could not be aware even of facts about myself if cognition did not transcend itself. Since the law that this transcendence is impossible if it were a law would be different from my awareness of it I could not know or even think this law without the very transcendence which it contradicts. And if processes of cognition transcend themselves at all I do not see how we can set limits *a priori* to the degree of the transcendence.

It is sometimes argued that mind can only know what is like itself, namely mind, and that therefore reality must be

mental but we may note that even those who hold such a view admit knowledge of something generically different from minds, namely universal laws. Nor do they succeed in showing that cognition¹ is compatible with the degree of unlikeness that prevails between different minds but incompatible with any greater degree of unlikeness. An argument to this effect might be based on the premiss that the presence of a relation implies that its terms have a determinable in common in respect of determinate values of which the relation holds (as seems to be the case with most or some would say all relations) and conclude that what knows and what is known must be of the same genus if this condition is to be fulfilled. But it is difficult to be clear either that this follows logically from the nature of a relation as such and not only from the nature of most of the particular kinds of relation we know or that mind and its object could not have a determinable in common without the object being mental and further the argument would seem to be equally incompatible with knowledge of universal qualities and laws which are not even existent entities.

To know is to know something and this something cannot be just our knowing it. To ask whether we are justified in assuming that reality must be as we must think it is equivalent to asking whether what has been proved or really seen to be self evident is true of reality. If it is not true of reality it cannot be really self evident or have been really proved. That reality must conform to our thought in so far as there is no intrinsic error in the latter is not strictly speaking an assumption but something that is involved in the very conception of correct thinking. Universal doubt is indeed possible as long as we are not contemplating any particular argument which we see to be valid but to see any argument to be valid is itself to see that scepticism is logically untenable. This does not mean that we can refute the sceptic when we play the game according to his own rules (or rather absence of rule) for he will refuse to admit any proofs as valid but as he can only do as long as he merely treats proofs in general and does not think out the well established proofs e.g. of mathematics that is as long as he does not consider the proofs properly on their own merits. The question—how can we know that reality must conform to the laws of thought (mean-

Most realists would agree that knowledge in the strictest sense is possible either of physical things or of minds other than one's own,

ing by this the laws of logic¹ is one that cannot legitimately be asked and if it is once asked can never be solved by either a realist or an idealist philosophy.

If we admit on the one hand that we may come to new concepts and on the other that these concepts are not identical with but true of reality we may seem to be involved in some form of the correspondence theory with all its difficulties. This is however a point the discussion of which must be postponed to a later chapter. In regard to the physical world so new and similar considerations seem to me fatal to the direct theory of perception but I shall try to show later that a representative theory of perception does not necessarily carry with it a representative theory of cognition.²

However what is usually meant by the idealist seems to be that our knowing is not the original making of the objects known but a kind of remaking after the pattern of the Absolute knowing. This would avoid the objections in question and there seems to be a good deal of truth in the theory at least as applied to certain objects of cognition. To understand another human being we must to some extent relive his life in imagination ourselves.³ And certainly if there is an Absolute Mind or God our knowing (in so far as it is genuine knowing and not error) will be either (on the pantheistic or immanent view) a part of God's thoughts or else (on the transcendent view) a very imperfect reproduction of some aspect of them. Further even apart from any metaphysical assumptions of this kind it is difficult to see how I can really cognise an object of sense not actually present to my senses at the moment except by picturing it to myself and so remaking it in the shape of an image.⁴ Possibly it may even be legitimate to regard my action as a kind of remaking if I do not try to picture the object in a sensual form but rethink the mathematical formulae which govern its motion though I am not sure whether this conception can be applied

¹ I however deplore this usage of the term laws of thought just because it suggests that we know the laws of logic primarily as laws of our thinking.

² Ch. V sect. 1.

³ Ch. VI sect. 2.

⁴ I do not mean picture it in sensual images. This is the way in which we remake objects of sense but not the way in which we remake human experiences.

⁵ I can accept and understand many propositions about it expressed in words without doing this, but in the last resort I could only represent the meaning of the words to myself in this way.

at all profitably when we come to universals or anywhere except in regard to experiences and objects of sense (Signor Gentile argues that in order to understand geometry we must construct figures whether on paper or in our imagination¹ in order to advance in the sciences which give knowledge of the physical world we must make situations by experiment in order to appreciate history we must reproduce in ourselves the spiritual activity which is human history)

This is a point of view which may perhaps in some sense be included in even if transcended by any sound realism but the admission that the making involved in knowing is a *remaking* renders the doctrine incapable of serving as an argument for idealism though it may fit in well enough with an idealist system accepted on other grounds For it is now admitted that it is possible to know by remaking what we have not ourselves made and the remaking becomes a means of cognising what is independent of our process of cognition² Further it is quite clear that the making is not itself the cognition If I relived in imagination a man's experience without being conscious that he had had that experience if e.g. in writing a novel by an accidental coincidence I made one of my characters like a real man whom I had never met I should not be knowing him or his life nor even having true beliefs about him To cognise something I must not only remake it in my mind but realise that my remaking of it is patterned on an object which is independent of the act of cognition in question

The remaking theory regards our cognition as a copying of something in reality and so shares many of the defects of the copying theory of knowledge against which idealists have inveighed so fiercely It is alleged against the latter theory (a) that our ideas cannot be like reality and therefore cannot copy reality (b) that, even if they did copy reality the mere possession of ideas which copied a real fact would not constitute knowledge of that fact (c) that we could never know whether our ideas did copy reality unless we already had a direct apprehension of reality and that this apprehension could not

¹ This view of geometry also maintained by Kant would be contradicted by most modern mathematicians and philosophers who deal with mathematics

² It might be argued sophistically that remaking implies a being who was the original maker of what we remake but clearly unless the existence of such a being has been independently proved this argument is merely verbal

itself be regarded as a case of copying reality. The remaining theory avoids the first objection by assuming that all reality is of the nature of thought and rejects the first improvement of substituting for ideas conceived as static entities an active process of thinking but if it be taken as a complete account of cognition it falls a victim to the other two objections.

§ III IS THE OBJECT OF KNOWLEDGE INDEPENDENT OF BEING KNOWN? THE REALIST EPISTEMOLOGY

The argument that because I can only know what is in relation to mind I have no right to assert and good reason to deny the existence of anything independent of mind may be regarded in the main either as inductive or as *a priori* in character. In the former case it resembles an inference by incomplete enumeration from the premiss all instances experienced have characteristic x to all instances whatever have this characteristic giving a conclusion which though not certain might seem owing to the extraordinarily wide range of the premiss (covering not only some particular observations as is the case with the premisses used in the establishment of any ordinary law of nature but the whole range of our experience in the most diverse fields) to be at least as probable as any other conclusion whatever established by induction. Unfortunately however there is a circumstance which takes away all the evidential value of the premiss. Namely an induction to the effect that a property belongs to all of a class based on the fact that it belongs to some of the class is only of value provided there is some reason to suppose that if any member of the class did not possess the property, they would have been at least reasonably likely to

¹ I do not venture to assert that its protagonists take it as this but at any rate they do not show that they are aware of the necessity for supplementing it in the way suggested and its bearing on the theory of knowledge is radically changed if it is thus supplemented.

² Only in the main because on the one hand I obviously know *a priori* in any case that I cannot know anything which does not possess the characteristic known by me and again I could not so much as understand what knowing means without some experience of it.

³ I am using the word here to cover only Mr. Johnson's problematic induction not intuitive induction or any other kind.

⁴ I say resembles not is because the premiss is not here reached by enumeration but *a priori*. The transition from the premiss to the conclusion however is the same as in an argument by incomplete enumeration.

occur among the instances known to us. In this case however not only is there no such reason but there is the strongest reason to assume the contrary. For obviously no instance that did not possess the characteristic of being known by mind could be known by us. Regarded as inductive the argument would be on a par with inferring that because we need microscopes to see bacteria these bacteria cannot live without microscopes. It does show indeed that we cannot settle the question against idealism by empirical evidence because obviously we can never experience anything of which no mind is conscious but this is the limit of its usefulness.

So we need not wonder that the idealist argument is usually regarded as *a priori* rather than as inductive. It takes the form that *esse* implies *cognosci*¹ or at least that it implies some relation to consciousness. This argument is difficult to refute because it is always hard to prove the negative that A does not imply B unless we have experience of instances of A occurring without B and from the nature of the case such experience is not available here and those idealists who regard it as self-evidently true that nothing can be without being known are unmoved by the realists' counter-assertion that he cannot see the self-evidence. Still various lines of attack are open to the realist.

In the first place it seems perfectly clear that though the object of consciousness has in philosophical argument often been confused with the consciousness of it the two are in fact quite different. The object of my consciousness may be a blue patch or a mathematical ratio but my consciousness is not therefore blue or extended in the first case nor is it a mathematical ratio in the second. The most an idealist can reasonably maintain is not that the two are identical but that the one necessarily implies the other so that e.g. a shape cannot exist without the consciousness of it though it is not the same as the consciousness of it. In Kant's terminology it is not an analytic but a synthetic proposition that he is

¹ I have used the term *cognosci* rather than *percipi* because we are here considering idealists' arguments based on epistemology and not on the theory of perception. As a matter of fact it is quite inaccurate to say that the idealist holds all *esse* to be *percipi*. It is only true at the most to say that he holds the *esse* of matter to be *percipi*. The *esse* of mind is perhaps *percipere* but certainly not *percipi* for the idealist though it may perhaps be *cognosci*. Further I have used the word *implies* rather than *is* since this is all that would be to reach an idealist conclusion.

defending. This is not however a fatal objection to the rival view in that it leaves open the possibility which seems plausible that it is not an *a priori* conclusion that we can never by inference know it in truth that we do not know already. It is quite possible that two things may be different and yet inseparable. Colour and the same quantity as extension yet it implies extension. The sides of a triangle are not the same as its angles yet its sides and its angles are inseparable. Similarly mind and non-mental objects *in sight* still be correlated neither of which could exist without the other existing also. Their very difference might be a reason for their interdependence because one was needed to supplement the other. Even the well known *Refutation of Idealism* by Professor Moore is not intended to disprove the possibility of such a relation of implication but only to remove certain self-contradictory errors which the author believes to have constituted the only reason why thinkers ever supposed that there was such an implication. In so doing he rendered philosophy a great service but I cannot share the confidence expressed in the article that an idealist would necessarily cease to think that he saw such an implication once he realised that the object of consciousness and the consciousness of it were not identical.¹

We may note also that most of those who reject the view

¹ In view of the allegation often made against Berkeley in particular that he confused an act of sensing and what is sensed (the *sensum*) it is worth noting that in his dialogues he makes Hylas raise the very objection (*Dialogues* ed. p. 220 ff. *Principles* section p. 146 ff.) and replies through Philonous that (a) there cannot be an act of sensing or perception because we are passive in the experience and do not produce it by our will (b) we should then have to make the same distinction in the case of pain but it is obvious that pain cannot be a quality of matter. The first point is a relevant and valid objection to the common description of sensing as an act but no objection to making a distinction between sensing and what is sensed. The second point raises some difficulties but cannot be a valid reason for refusing to distinguish two things which are patently different. We thus see that Berkeley did not commit the alleged confusion unwittingly but had considered the point and then as I think wrongly decided that the distinction was untenable. Further in § 49 of the *Principles* he insists that the qualities of the sense datum or image are not qualities of the mind but only qualities in the mind. Kant distinguished a mental act and its object very sharply consciousness being for him a transcendental and the object a phenomenal factor. It also seems to me that most at least of the leading post-Kantian idealists recognised the distinction though they did not express it so clearly as Professor Moore has done.

that an object implies consciousness seem to accept the converse proposition namely that consciousness implies an object¹ But anyone who makes such an admission as this is altogether debarred from rejecting the idealist view on the ground that an object is different from the consciousness of it and therefore cannot imply the latter The fact that A implies B does not necessarily carry with it the conclusion that B implies A but it does carry with it the conclusion that you cannot rule out this possibility on the ground that A and B are so separate that there can be no relation of implication between them

It is desirable here to draw a distinction between experiencing and knowing because an idealism which is built on the view that to be directly² implies to be known is open to objections which an idealism built on the view that to be or at least to exist implies to be experienced escapes altogether This second type of idealism will however best be discussed when I have to deal with the specific problem of the physical world

Against the epistemological arguments the counter assertion is made by the realist that the fact of knowing necessarily implies that the object known is altogether independent of being known³ On this point indeed there seems to be com-

¹ Not necessarily a physical object

² I add the word directly because if on non epistemological grounds we came to the conclusion that all reality was dependent on mind it might possibly follow that everything which was known, but this would be different from saying that being as such implies being known A theist for instance may hold that God knows everything and that therefore everything which is known without ever having accepted or even thought of the epistemological argument in question

³ V Professor Moore *Philosophical Studies The Refutation of Idealism* p 29 Professor Prichard *Kant's Theory of Knowledge* p 118 Professor Pitkin *New Realism* p 477 In an article in *Mind* (vol XXIV N S no 135 p 309) I used an argument against this view which now seems to me fallacious I objected that it was self-contradictory to maintain as realists do that the nature of knowing is such that the object known must necessarily be independent of the knowing of it For I said the argument is that it is implied in the very nature of knowing *qua* knowing that the object of knowledge is independent of the cognitive relation in question But since the independence alleged must mean if it is to prove the point that the fact of knowing such implies nothing in the object we have the curious paradox that knowing *qua* knowing implies that nothing in the object is implied by knowing *qua* knowing Or in other words it follows from the very nature of knowing that the object of knowledge has a quality by

he process is not altered by any subsequent change in my condition. Similarly if I find the room cold and light a fire the temperature of the room is changed as a result of my knowledge but what I knew was that the room was cold at a given time and this fact is not changed. Even in the case of anticipating future events it might be said that what I cognise is always only the probability of an event relative to certain data and this is not altered by the factual occurrence or non occurrence of the event anticipated or by any happenings other than those which form the data.¹ These cases therefore need not overthrow the realist principle. If there is as some people claim such a thing as immediate correct cognition of the future and if the cognition is ever a part cause of the future event cognised we have a case which seems more difficult to reconcile with the absolute independence of the object of cognition maintained by the realist. He might however still escape the difficulty by maintaining that the immediate object of cognition in such cases was not the future event as an actuality but only as a possibility.

Two objections may rightly be brought against many statements of the realist argument. One of the chief reasons why the argument seems valid is because it is assumed that if I did change what I knew by knowing it I should falsify the facts and so should not *know* it. Now in the first place this already presupposes the truth of the realist view that the object known is there prior to the knowing of it otherwise it would be meaningless to talk of changing it by knowing it. If no object can exist apart from being known it cannot be changed by being known. The idealist may reply that we are not seeking to know things as they would be in a world in which no one knew them but as they are in the actual world where minds do know them. Their nature depends from the beginning on their being in such a world but this does not mean that they are changed by each particular act of knowing them.

Secondly, it is obvious that in so far as I know at all I must know things as they are but is it impossible *a priori* that I might know S as it really was and yet change S by knowing it? Even if I did so my cognition would still be true of S as S was prior to the change initiated by my knowing it.

¹ I accept Dr. Keynes' view that the same event may have all manner of different degrees of probability relatively to different data and that there is no meaning in speaking about the probability of an event except relatively to certain data.

There are left objections quite sufficient to demolish the idealist argument. In the first place it seems quite clear that cognition is an essentially different thing from making and that the so called mental construction which accompanies cognition in so far as it is anything which can with the slightest show of reason be called construction is simply not cognition at all. No idealist arguments that I have seen go any way towards proving that cognition is making at the very most they show that it involves making and the difference between knowing or opining and making¹ should be plain to inspection.

Secondly knowing clearly presupposes an object to be known and this object is logically prior to and cannot be dependent on or made by the knowing. Knowing is a discovery of what is and this must be there to be discovered it cannot be the result of the discovery of itself. If we eliminate this factor in knowing it ceases to be knowing and becomes imagining inventing or erroneously supposing. The object known cannot indeed be always said to be temporally prior because sometimes as with the laws of logic or mathematics or all hypothetical propositions it is not temporal at all but it seems clear that it is logically presupposed by the knowing of it². To say that an object depends for its existence or being

of which I am aware but this is not to know it at all as a distinct fact. But even if I were wrong and it were impossible for anyone to know X without also knowing in the strict sense of know that X was known by him this would not make the second act of knowing part of the first act and so disprove my argument above.

¹ Even if the object known were made by us in a given case the making of it would not be the same as the knowing of it and the knowing would not do the making.

² A difficulty arises in regard to future events. The difficulty would be enhanced if the genuineness of any of the alleged cases of direct prevision of the future could be established but in any case it might be contended that there was such a thing as knowledge of the future for I know e.g. that all cases of $2 + 2$ in the future will be cases of 4. And there undoubtedly are cases of right opinion about future events. Three possible ways of meeting the difficulty suggest themselves. In the first place it might be held that the object of knowledge or opinion was never anything future as such but either a hypothetical fact or a fact about the probability of an event relative to given data both these kinds of fact being non temporal. Or secondly we might ascribe to future events a kind of being though a kind different from that belonging to present events. We are forced to adopt a similar view in regard to the past since if we deny being both to past and future we have nothing real left except an infinitesimal present. This would not be to say that succession in time is unreal but to say that its reality consists in the passage of events from one of these three classes

on the knowledge of it thus involves a vicious circle for it must be already it is to be known. Likewise right opinion equally presupposes an object of the opinion which we judge to be as it really is when we form the opinion.

Thirdly the view that objects of cognition are changed by or dependent on the cognition of them would lead to the conclusion that past facts are changed by or dependent on the present earlier events changed by or dependent on subsequent events.¹ It is impossible to escape this paradox by interpreting the phrase 'object of cognition' as meaning 'the truth known' and arguing that this is timeless on the ground that if it is ever true at all that anything was at a certain time in a certain state it will always remain true that it was in that state at that time however much it may change afterwards. For in that case if the act of cognition changes or makes its object it does not indeed change or make the past but it changes or makes the timeless which seems more absurd still. It is no argument to say as idealists and pragmatists sometimes do that we must in any case admit that the past is capable of being changed by subsequent events because it acquires new relations to these events for the relation between a past and a present or future event is not itself past. The paradox

of being to another. An event would always have being but it would first have the kind of being appertaining to future events then it would acquire the more complete type of being belonging to the present and be left thirdly with the kind of being peculiar to past events. Or finally we might adopt still another alternative and suppose that the future as such did not have a being, but that possibilities (or some of them) did so and that a prediction thereof was the object of our cognition. If there should prove to be genuine cases of immediate (as opposed to inferential) cognition of the future one of the last two alternative theories would presumably have to be adopted.

¹ Signor Gentile replies that it is not the knowing I go but the known Ego that is in time. When we compare past and present facts about ourselves we are not really comparing two realities one present and one past but two empirical representations both equally present as the actuality of the I which compares and judges equally present because although variously assorted in the time series all our past states are compresent in the temporalising act of the mind (*Theory of Mind as Pure Act* trl by Wilkon Carr p 126 ff). But if it is just a question of the empirical representations now present we are not judging of the past at all. Signor Gentile does not mean to deny the reality of time but he seems here to be trying to eat his cake and have it i.e. to enjoy the benefits for his argument derivable from denying the reality of time while yet asserting it. There is a good deal to be said in favour of the view that time is unreal though I do not agree with the doctrine (v below ch III sect 3) but our acts

can only be removed by the idealist if he regards everything as dependent on the Absolute's knowing but holds a realistic theory of *our* knowing

Fourthly similar difficulties arise in regard to universal laws. It is clear that we as finite knowers do not make them valid by thinking them and if we ascribe this to an Absolute Mind we must hold a realist view concerning our own cognition of them

Fifthly it seems clear that even of the characteristics of our own experience some are not known. My experience always includes a great diversity of organic sensations and of sense impressions due to my surroundings but when my attention is concentrated on some object e.g. on writing this book I am only aware of these if at all as a confused whole and do not know them in detail. I might know some of their characteristics by a simple act of attention but I do not know them in fact since I am attending to something else. To be experienced does not necessarily imply to be known. Since nobody practises introspection all the time it seems perfectly clear that there are a great many transitory elements in our experience of whose existence we never come to know. Even the lower animals presumably have felt experiences but it does not necessarily follow that they practise introspection and know these experiences as such. Again young children are generally supposed incapable of introspection and certainly of discovering all the complex facts which a psychologist would discover if he had the power to observe directly their mental states. Even for trained adults it is very difficult to introspect effectively and there is so much dispute among psychologists as to what goes on in our minds that even apart from any theories as to the unconscious it seems perfectly clear that there is a great deal in our experience which we do not know. It is useless for the idealist to reply that all our experience is known as a whole being (to borrow Professor Broad's phrase) the object of indiscriminating awareness because that still leaves certain facts unknown namely the detailed facts about the parts of the whole. And in a great number of other respects the hypothesis that there are elements

of cognition as observed by us empirically undoubtedly occur in time so that if time is real they cannot be regarded as non-temporal, while if time is unreal then reality is so different from their appearance that we cannot determine the nature of the former from the latter or make any statements about our real knowing

in our experience of which we are not explicitly or discriminatively aware i.e. which we do not know. Such is found to be indispensable if we are to give any satisfactory account of our experience at all.

Sixthly, by the same ordinary processes by which we cognise anything we commonly arrive at the conclusion that what we cognise is altogether independent of our cognition. We undoubtedly do so in the case of past events and other human minds and our conclusions here seem to be accepted as valid even by idealists. We do also in the case of all *a priori* knowledge for when we know a law *a priori* we know it as universally valid and therefore as valid independently of our knowing it. The only way in which the epistemological idealist can meet this objection is by maintaining that what we know though independent of our knowing is not independent of all knowing. Now we cannot rule it out in advance: it is impossible that I might be aware that an object necessarily possessed the property of being known and yet also be aware that it was independent of my knowing. But it is exceedingly difficult to see how I could ever come to this conclusion when in the only cases of cognition (whether knowledge or opinion) of which I have immediate experience I commonly find that so far from the object being inseparable from my cognition of it the very cognition itself forces on me the conclusion that the object cognised exists or subsists as the case may be independently of my cognising it. A universal proposition about cognition like any other universal proposition must be ultimately based not indeed necessarily on empirical evidence of particular cases but if not on that at any rate on an insight that the universal connection holds in particular cases. Yet in the particular instances of cognition which we experience so far from seeing that the nature of the object or the fact that it has being implies that it must be known we often at least see the opposite: i.e. that the being of the object does not imply but is independent of the only knowing of which we have experience namely our own. All these considerations seem to me to render at least very unpalatable the view that being implies being known and to disprove conclusively the view that the object of cognition is made, changed by or dependent on the cognition of it.

Some idealists urge against the view of the object of knowledge as independent of being known that it would make change or novelty impossible. Knowing it is said, would

cease to be anything of value and become a mere copying of what is already there a mere redundant repetition and reality since it would have to be there already for us to know would be already fixed and determinate and so would exclude the possibility either of change in the world or of activity on our part whether practical or theoretical. For activity must consist in changing and moulding not in accepting what is already given. Such arguments are urged by Signor Gentile not only against realism but also against any idealism which is not purely immanent.¹

This objection does not however seem to me at all formidable. Knowing may be something genuinely new even if it does not mould or transform the reality known. For it is a new experience and any reasonable form of realism will regard the experience of human beings as a genuinely real part of reality. Knowing changes the state of the mind which knows and this is as much a novelty as if it changed the object known. If though new it presupposes something old namely the object known in this it only resembles all other novelties. If we hold the copying theory knowledge may seem indeed a mere repetition of reality but the copying theory is not necessary to realism and there are other considerations besides this which make it untenable. Again if we assume that the aim of knowledge is to establish identity with its object then knowledge seems to be nothing at all beyond the already given object. But once we have realised that the knowing of x is not and cannot be either the same as x or a mere copying of x then this knowing may well even in a world where x has always existed be a genuinely new occurrence. The objection is likewise invalid against transcendent idealism for even if we assume that a transcendent God knows everything from the beginning since we are finite minds our knowing will be specifically different from that of God and so will be a genuine novelty though modelled in certain respects on that of God.

Again I quite fail to see why realism or transcendent idealism should be held to be inconsistent with change in the physical world unless we assume *a priori* that mind is the only thing which can change. Reality may change as much as you like yet those qualities in it which we know may still not be changed by the knowing of them. All or almost all our knowledge is

¹ *Theory of Mind as Pure Activity* trl by Wildon Carr pp 4 52 ff

of past events and time so that it would seem that to put it in the past is to complete and make it irrevocable. Whilst past events if it were not already positively completed, given, could the timeless possibly be changed in time must it not from the nature of the case be given once and for all? By neither were no epistemological considerations which pointed in that direction it would still be quite clear that this characteristic of completeness and unalterableness belonged to universal laws and to past events.

Paradoxical though it may seem the past may indeed change its properties in the sense that it may acquire new relations to events subsequent to itself but a sharp distinction must be drawn between these and all its other characteristics which cannot be changed even in the minutest degree by subsequent events. We can easily see this to be consistent with the proposition that what is past itself cannot change by noting that the relation between a past and present event is not itself past. Neither is the relational characteristic of standing in that relation. It indeed this can be said to be temporal at all it cannot be placed in any time earlier than the later event to which the relation holds. For example, the battle of Hastings stood to the battle of Waterloo in the relation of followed by only from the date at which the latter occurred and therefore the relational characteristic of being followed by the battle of Waterloo cannot have been possessed by it at any time earlier than the second battle. Earlier than this the battle of Hastings may have stood to the battle of Waterloo in a different relation such as destined to be followed by or capable of being followed by but with these relational characteristics our problem does not arise for if the former event ever stood in such a relation to the latter it did so from the very time when it itself first occurred and did not acquire the relation after it had ceased to exist itself, as was the case with the relation followed by. So we may still maintain that nothing which is past changes for though

¹ Since a process of cognition must always take time it is difficult to see how we can ever know the present. For even if the act of knowing itself is instantaneous the auxiliary thought processes involved must occupy some short time period.

² I am thinking of universal laws here but as I have remarked earlier the object of knowledge may in a sense always even in the case of particular events be regarded as timeless.

³ If it is possible to stand in any relation at all to what has not yet occurred.

past events acquire new relational characteristics these characteristics are not themselves past. This leaves us indeed with the paradox that something may have relational characteristics which are not contemporary with itself. This paradox will have to be accepted though it may disturb common sense. But it is certainly not peculiar to epistemology. It is true that when I came to know that the battle of Hastings was lost by Harold this fact ¹ acquired the new characteristic of being known by me but it also acquired the new characteristics of being temporally and causally ² related in a certain way to me. These relations are not indeed of any considerable historical importance but they are real all the same.

A similar paradox arising in regard to universal laws and timeless hypotheticals may be met in a similar way. The relations of the timeless to what is in time can change but not the timeless itself. As with past facts the paradox arises both in regard to the relation known by and in regard to other relations e.g. exemplified by and is therefore not peculiar to epistemology.

§ IV THE EPISTEMOLOGICAL ARGUMENT FROM INTERNAL RELATIONS

Epistemological idealism is also sometimes based on an argument from the nature of relations. It is assumed on general grounds that all relations are internal and then since knowing and its object are related it is concluded that knowing must make a difference to its object thus overthrowing realist epistemology. Against this view realists argue that since the conclusion is absurd the premiss must be false and the relation between knowing and its object must be external. In this chapter I shall confine myself to showing that both sides have made a mistake in supposing that the conclusion follows from the premiss in question. The meaning and validity of the premiss will be discussed later ³.

¹ Properly speaking what I know is never events but facts. I only know an event in the sense of (a) knowing certain facts about it (b) being immediately acquainted with it a different sense of know with which we are not concerned here.

² If the battle of Hastings had not been fought or had resulted differently the institutions and social life of this country would in all human probability not have been the same and what I am is partly at least due to the civilization in which I was brought up.

³ Chap. IV

Now we must admit that there is a relation between cognition and its object. I think very rarely are different facts and feelings identical. There is no third alternative to such a view: it would maintain that cognition and its object are both identical and fully unrelated. There is always a tendency in some quarters to assert the identity of knowledge and its object, but I cannot help feeling that those who take this line have not adequately realised what their words mean. Even if there is a very close connection between knowledge and its object, this does not involve identity, either qualitative or numerical. Can we hold the fact that I know I had to catch my minutes ago and the fact that I had the toothache then to be one and the same fact? Can we hold that they are absolutely indistinguishable and identical, that there is not the least difference between them? Can we hold that they are completely the same in existence, quality and temporal position? Even philosophers must confess themselves incapable of such a feat of faith, and this is even more clear if we substitute a universal law, such as $x + 2 = 4$. But if what is known and the knowing of it are not one and the same fact, they must be different and related. Bradley suggests that we ought not to speak of a relation between them because they are two inseparable aspects of the same thing, but to say this is not to escape the dilemma: if it is a dilemma, but only to say that they are related extraordinarily closely.

Now can we avoid the admission of a relation by falling back on partial identity? For if my knowing and what is known were partially identical, there would still be a relation between those elements in each which were different, and further even partial identity cannot possibly be defended unless we mean the identity to be qualitative, not numerical. They can only be said to be partially identical if it all in the sense that they have qualities in common, but in this sense most things are partially identical with each other. However many qualities they may have in common, they still remain numerically different but related.

It does not affect this argument if a physical world independent of us be denied, because it is equally obvious that a past experience and my present knowing of it or thought

¹ It is not however easy to see what qualities they have in common except those if any which everything has in common with everything else.

of it are different facts. And if my knowing and its object are different facts they must be related since otherwise I could not know the object I know. The distinction between relations and terms may be a very inadequate way of dealing with the concrete continuum but we seem to have at least as much justification for applying the distinction here as we have in the case of other relations. All relations may be phenomenal but at any rate we must admit that judgments asserting relation must be at the very least partially and phenomenally true. Relational judgments may only give truth of a low degree but at any rate this is the best truth that we can attain by thought since all our judgments are relational.

It is sometimes held that there is no specific cognitive relation¹ but even if this is so cognition and its object must be connected by some other relations. If not our knowing would have nothing to do with the object known our judgments in knowing would not be true of it and would not be in the slightest degree dependent on it they would be mere groundless imaginings. It cannot be legitimately objected that the past which we know is now non-existent and therefore cannot be a term of a relation now for the past obviously in any case bears some relations to present events e.g. causality similarity priority in time therefore we must either admit that the non-existent can stand in a relation or deny that the past is non-existent.

Any two facts in the physical world must bear some relation to each other however unimportant and indirect it may be. They must have some temporal relation some (though perhaps a very indirect) causal connection some similarity or difference. Further it would seem that any cognition which yields truth must stand in some relation involving dependence on and conformity with its object.

Now it is assumed by many idealists² that if any terms are in fact related by any relation the relation could not have been different without the terms also being different in some respect or respects³ (other than the mere absence

¹ E.g. by Professor R. W. Sellars *Critical Realism* p. 214.

² For a good example of an idealist argument which assumes and depends on the doctrine of internal relations v. Royce *The World and the Individual* vol. I Lecture III.

³ I am here having recourse to the common formulation of the view. On p. 131 I point out (the suggestion comes from Professor G. E. Moore) that if it is to cover relations between universals the statement must be amended.

of the facts the finding of a relation and from this the conclusion that the relation is a difference to the object known. It is true that the knowledge is untenable. I am not here concerned with the grounds for this view about relation (commonly called the theory of internal relations) but with the conclusion drawn from it in regard to cognition. Not in I concern I with other senses in which relations may be said to be internal. These matters will be discussed in a later chapter. All I shall try to show here is that *even if* it be the case that cognition and its object are related internally in the sense defined it does not necessarily follow that the object of my cognition is changed or brought into being by my cognition.

Now the view described is often expressed by using the words "make a difference to". This phrase however ordinarily means "cause a change in" and it is this sense of the words on which turn most of the realist objections that I have mentioned. It seems absurd to suppose that my cognition can cause a change in the past or in a universal law. But does this absurd consequence really follow from the doctrine of relations in question? It would only do so if the proposition were true that whenever any terms A and B are connected by a relation which is internal in the sense defined the presence of the relation¹ causes a change in A and B. But this proposition is certainly false. If A is like B in respect of a certain quality or qualities there is a relation between A and B which is internal in the sense defined namely the relation of similarity. If A and B are similar at all they could not have failed to be similar to each other, unless they had been different in quality from what they now are. Again if A is half of B the relation is internal since it could not have been absent without A or B being different in size from what it now is. The relations mentioned are clearly internal in this sense if any relations are yet with neither of them is it true that the relation causes a change in the terms related. The fact that A is similar

¹ I do not mean to maintain that knowing is simply a relation but at any rate it implies a relation and if an argument of the kind in question is to be possible at all it must be to the effect that the relation implied in knowing is of such a character that the object known cannot be the same as it would have been if it had not entered into the relation.

to B or half of B does not cause a change in either A or B. And it is equally obvious that this relation though internal does not create, make or bring into being either of its terms. The same is clearly true of the numerous internal relations that hold between timeless universals as in pure mathematics. We therefore cannot possibly argue that just because knowing and its object are internally related it necessarily follows that knowing either causes a change in or brings into existence its object for we have seen that in other cases such a conclusion does not follow from the fact that a relation is internal. To justify the conclusion in the case of knowing a further argument beyond a mere appeal to the internality of the relation would then be needed and this argument has not been provided.

There is another internal relation the case of which is more nearly parallel to that of the relation between knowing and its object namely causality. For it may be argued that both the effect of a cause and an instance of knowing in so far as it is really *knowing* are completely dependent for their nature on the other term of the relation i.e. respectively the cause and the object known. Now in the case of causation it is generally held that the effect could not have failed to occur unless the events which acted as cause had been different in some respect¹ from what they were but do we therefore hold that the effect changes or modifies (causes a change in) the cause or brings into existence the cause? Certainly not. Then why should we draw this conclusion in the case of knowing even if it be true as we grant here for the sake of argument that the relation involved is internal in the sense defined? Perhaps the point may be made clearer by an illustration. Suppose a man had died through his head being cut off. In that case it would certainly be true that if the man had not died it could not be a fact that his head had been cut off just as idealists suppose that, where it is the case that I know S, S could not have been the same if I had not known it. But would it be right to conclude from this that the man had cut off his own head or that by dying he had caused a change in the preceding stroke of the axe which led to his own death? Certainly not. Therefore why should we argue similarly that because as the idealists assume the object known would have been different if I had not known it therefore

¹ Other than the presence or absence of a relation of causality

my knowing changed or brought into existence the object known.¹

It is the chief argument for idealists to argue that because all relations are internal in the sense in question idealist epistemology is true. For idealists to argue that because all internal relations are such that the relation between knowing and its object at any time cannot be internal and this conclusion of ours is not only negative is still very important in view of the use made of these arguments. We can later discuss the question whether all relations in general and the cognitive relation in particular are internal in that sense without being disturbed by any desire to establish or to overthrow epistemological idealism.

The assertion that knowing and its object are internally related in the sense defined would not make it impossible for us to know² what anything was like before we knew it or even before it was known by anyone. For even if it were true it would only lead to the conclusion that the world being what it is, minds could not have failed to know any given fact that they actually have come to know perhaps thousands of years afterwards unless it had been different not to the conclusion that by knowing it they made it different from what it was before they knew it. For although what they know may have existed before they knew it, it never existed in a world in which they were not going to know it and to ask what it would have been like in such a world would be to ask a futile question for we wish to know not what it would be if the world were different but what it is in this actual world. That it would have been different

¹ I do not mean to identify the cognitive relation with causality far from it but all I need to show is that the supposed fact that the relation between knowing and its object is internal would not necessarily imply that knowing changed or brought into existence its object and for this purpose it is quite to the point to show that in the case of other internal relations this inference cannot be drawn. It would not be sufficient to show this if the argument were based on the specific nature of the relation between knowing and its object but it is not based on that it is based only on the premises that the relation is internal in the sense given and it is easy to show by contrary instances of internal relations which do not change or bring into existence their terms that this fact cannot prove what both sides apparently think that it proves.

² Know is here as by those who have employed the arguments discussed used in its less strict sense. We can hardly claim to have *certain* knowledge on these subjects.

if it had been such as never to come to be known would not matter in the least since it actually is known or is going to be known. To take an illustration granted that a particular Englishman has had a tolerable education in history he could not have failed to learn at some time of the battle of Hastings unless the battle had been much less far reaching in its effects than it actually was therefore we may say that he being what he was if he had not some time known that the battle of Hastings took place the battle would have had to be different from what it was yet this certainly does not imply that the battle was dependent on or made or changed by his knowing it to have taken place. Needless to say we have not as yet at any rate offered any argument to show that the relation between cognition and its object is or is not internal but only repelled an idealist argument based on the assumption that it is internal in a given sense and removed a realist objection intended to show that it could not be internal in this sense. And here I must leave the question of internal relations for the present and pass to other epistemological arguments for idealism.

§ V ROYCE'S ARGUMENT

A more difficult argument to combat than any yet put forward is provided by Royce. It is based on the close connection between knowledge and purpose. Royce points out that all judgment involves purpose in two essential respects. (a) What it shall select as its object is fixed by the purpose of the knower. Even the realist does not deny that I can within certain limits select whatever I please as the object of my investigation or judge about whatever known truths or matters of opinion I choose this choice being determined by my purpose whether the purpose be a mere momentary whim or have as its object the most vital interests of the human race. (b) The way in which my thoughts or cognitions shall correspond to their object and so the standard by which they are to be judged is also fixed by my purpose. A map, a verbal description and a book of photographs of typical scenery all correspond to represent the same country in a different way and so are subject to different standards and I can choose which I shall produce and so by which standard my production is to be judged. Similarly with any judgment its truth or falsehood must be tested by and so

Absolute Mind purely immanent we fail to do justice to the facts which support the former tendency if we make the Absolute Mind purely transcendent we seem to neglect those which support the latter. But according to Royce I attain knowledge only in so far as I conform to an Absolute purpose which transcends mine and is not made by my seekings after it yet this Absolute purpose is itself my own ultimate purpose what I really want though I may not consciously realise it. Otherwise there would be no reason why I should seek to conform to the Absolute purpose and the errors would not be my errors.

Royce's theory developed as it is into a whole philosophical system is a fine example of metaphysical thinking and one that must be judged as a whole and cannot be dismissed by disclosing a verbal fallacy or two. It remains a possible and so far as I can see a fairly coherent account of reality what is more it deserves a high place among the great metaphysical systems of the past. But it is not as Royce actually claims in one passage logically necessary. For in the first place he only disproves the realist view by exaggerating the independence which the realist is committed to claim for his objects and by using an argument based on internal relations which as I have tried to show¹ possesses no validity. Secondly even if he has succeeded in disproving both realism and the two other views he cites (the mystical and the critical views) he has not shown that he has exhausted the possible alternatives to his own view.

Thirdly the facts cited about the connection between purpose and cognition are not necessarily incompatible with realism. I may well select which of the objects that exist independently of being known I shall attend to and I may decide by my purposes the way in which I shall seek to correspond in my cognition to that object thus determining the standards according to which my cognition shall be judged but that does not mean that the object is dependent for its existence or content on anybody's cognition of it. All that follows is as far as I can see, (a) that it could not be an object for me without my cognising it (b) that I decide the way in which my cognition is to be tested but not the result of the testing. To select an object is not to determine the content of it but to determine that I shall stand in a certain relation to it, and further it is difficult to see

¹ Sect 4

how I can select without presupposing a range of alternatives themselves independent of my purpose in selecting. Nobody would dream of using such an argument in regard to particular physical objects and concluding that because I can choose to draw a map of Africa instead of Europe, and can decide by my own choice to include the parts of the continent which belong to the British Empire, thus fixing a standard according to which the accuracy of my map shall be judged, therefore my purpose decides which parts of Africa belong to the Empire and which do not. No doubt Royce and those who think like him see an essential difference between the argument he has used and the absurd argument about the map, but they cannot hope to convince realists till they have made clear as they have not yet done the difference between the two cases. It may even be admitted that I can only reject a view as untrue because it does not conform to a certain purpose of mine,¹ namely, the purpose of attaining truth, but it can only fail to conform because the part of reality under consideration has a certain character independently of at least this purpose of mine; therefore it is far from clear how all this can justify the conclusion that it must be dependent on some purpose, let alone my real purpose.

Fourthly there are the difficulties raised by the failure of purpose because of what seem to be recalcitrant facts. Royce holds that whenever I think that my purpose is thwarted it is only my purpose as it seems to me at the time and not my real purpose, but this is a very hard view,² and one that we could only accept if forced on us by the strongest arguments. I need not dwell on its obvious difficulties since I have tried to show that the arguments brought forward by Royce are far from strong, but I shall just point out that one of my *real* purposes must be to attain knowledge, and this purpose at least could attain no satisfaction if it did not presuppose a reality independent of itself to satisfy

¹ Similarly I reject a map of Africa as bad because it does not conform to my purpose of giving an accurate representation of Africa.

² It is only possible at all if we hold (1) that what a man *really* desires is always the good (never his own good in any sense which conflicts with that) (2) that if we could see all its consequences what happens is always what is best (3) that no one can ever *really* desire that it should be possible to gain the good in question *without* the pain and evil involved in the means (for if anyone does really desire this his desire is assuredly thwarted).

it That this reality might be an Absolute Mind I am not disposed dogmatically to deny but I do not see that we are brought any nearer this conclusion by the facts about the connection between knowing and purpose

There remains the argument that Royce's theory gives the only satisfactory account of the relation of correspondence between judgment and its object This is a point where it has perhaps a definite advantage over realist theories If the relation of correspondence is to be further analysed or described at all Royce's account is perhaps the most plausible I know but we cannot accept a given analysis of something which introduces unproved assumptions simply because all other attempts at analysis have failed The relation in question may well be unanalysable Some concepts must be in this position for otherwise we have a vicious infinite regress and a relation so fundamental as that between judgments and the reality of which they are true is as likely as any to be unanalysable I do not indeed accept as valid the argument that the relation must be incapable of being described in language on the ground that any further description would have itself to bear the relation in question to that which it described This argument depends on the assumption that a proposition cannot contain any assertion about itself and this seems to me false in any sense in which it would carry with it the conclusion desired For while it seems to be true that a proposition cannot contain any assertion about itself as a single proposition it may and sometimes does contain an assertion about a class to which it itself belongs and therefore indirectly about itself e.g. all propositions are either affirmative or negative most propositions can be analysed into subject and predicate propositions are not entities separable from the thinking of them But while I know no way of proving that the relation is unanalysable it is certainly not clear that it must be analysable¹

However it remains true that to regard correspondence as thinking like the Absolute Mind is a more intelligible way of regarding it than to look on it as copying or likeness or a one to one parallelism between Reality and the mysterious entities known as propositions The realist may object that to think like the Absolute would be to believe or know the

¹ But though I am inclined to think that it is unanalysable and indescribable in language I do not see any reason to draw the startling conclusions from this that are sometimes drawn

same propositions as the Absolute knows and to know a proposition is to know it to correspond to Reality, so that Royce really still leaves outside his theory the relation of correspondence which he is trying to explain since the propositions known by the Absolute Mind would still have to bear this relation to the real facts to which they referred. Royce could and could only reply 'as far as I can see by making a fundamental distinction between our knowing and the Absolute's knowing' and saying that to attain truth is to believe or know propositions which the Absolute makes true by knowing or at least by thinking them. This is not open to the objections I raised earlier in this type of solution in so far as the argument is based on the nature of the relation of correspondence and not on the nature of our knowing. It is difficult to see how an argument based on the nature of our knowing could give us any clue to a knowing which is so fundamentally different in kind from ours as to create its objects but an argument based not on our knowing but on the relation of correspondence might conceivably give such a clue. And the argument is to some extent supported by the fact which I pointed out earlier that in order to understand or know anything we must think it as it would be for a knowing mind. But I do not feel that these two points provide an adequate foundation for the conclusion that all objects known actually depend on some knowing mind.

Finally Royce would say that in all this as in any possible last reply I was still presupposing idealism for my argument to prove realism could do nothing but assert that certain ideas now present to you are valid ideas.¹ It still moves in the realm of ideas. This is in fact the most ultimate and fundamental argument for epistemological idealism. The only test of truth it is urged must come from the nature of the case lie within the realm of ideas and therefore we can never go beyond ideas. But I think that enough has already been said in the course of the chapter to show that this argument is invalid. We may reply first that it is equally true that the only test of truth for me must lie in my ideas but that this does not prove solipsism or prove that I cannot think any alternative incompatible with solipsism.

Secondly to recognise an idea as true is to regard it as applying to reality, to regard reality as qualified in a certain

¹ V *The World and the Individual* vol I p 249

way and this reality is always other than the idea in question. A test of truth may be a test in terms or ideas and by ideas but it is also equally essentially a test to decide whether something real other than the idea in question is of a certain character. Further by the very same cognitive processes through which I form my ideas and apply the test by ideas I come to recognise facts that are certainly not themselves at least human ideas.

Thirdly we can only say that the test of truth lies in ideas if we mean by ideas our thoughts about reality. It is obviously false if ideas means sensible images and there is no evidence for a set of entities ideas in the mind other than thoughts about reality and sensible images. But to say that the test lies in our thoughts about reality obviously is not to say that the reality thought about is necessarily either dependent on mind or mental. If we eliminate the reality thought about the thoughts are thoughts of nothing and the argument falls to the ground.

Fourthly the argument assumes that we are not from the beginning aware in at least our successful cognitions of a reality independent of the cognition. If we are aware of this a successful test by ideas is always at the same time an apprehension of something which is other than the ideas involved and is not itself apprehended as an idea. The realist can retort to Royce that any idealist argument itself presupposes realism for whatever is asserted as true by the idealist must from the nature of the case be asserted as true of something which is not a human idea (thought). The universal principles laid down by idealists like any other universal principles cannot be at least if true at all just ideas. Even if matter were reducible to laws governing our experiences such laws would be either universals of fact about our experiences or causal connections between different experiences and not merely ideas. Or at least they cannot be human ideas. Nothing that we have said indeed proves that these facts cannot be as Royce held ideas for an Absolute Mind but if we are necessarily aware in all successful cognitive processes of a reality which is not apprehended as an idea the argument that every fact must be an idea for an Absolute Mind because knowledge moves in the realm of ideas breaks down completely. Royce's conclusion may be true but it has not been proved by his arguments.

§ VI. A CRITIQUE ON TO IDEALISM

If the attempt to prove the need for an epistemology must be pronounced a failure, there still remains a serious difficulty to define in which our ordinary cognitions attach to the world does in hidden elements. The case with which ordinary language lends itself to various and multitudinous ways to fallacious arguments for idealism is itself a strong indication that the type of view criticised in this chapter does justice to some important element of truth which is overlooked by the realist and yet is vaguely felt to be present in our ordinary cognitions. Still more significant perhaps is the tendency of modern physical science to incorporate reference to an imaginary observer in its method.

On the other hand a thorough going idealist epistemology is quite incapable of working in any branch of knowledge at all. All particular studies—physics, biology, psychology, mathematics, economics, history, like—assume that the object studied is different from and independent of our cognitions of it. It might be objected that the moderate realism implied in this attitude is only a fiction which works. But I fail to see how we can make the slightest sense of any of these sciences without not only using the assumption as a fiction but accepting it as literal truth, whether we consider the question from a point of view within the science or from a higher philosophical standpoint.

Now we have already found an idealistic element in knowledge in the fact that in order to determine what something is we must first think what it would be for a mind fully and discriminatingly aware of it¹ and this does a good deal to explain the strength of the idealist tendency in philosophy and science. It enables us to conclude our discussion with a treaty of peace by which we grant epistemological idealism a place within realism as a method for attaining the truth about independent reality. For to think of objects of cognition as they are or would be for a knowing mind is a method necessary if we are to attain any truth at all. By this I do not mean merely the trivial tautology that what I cognise must stand in a relation, namely the relation of being cognised, to a conscious mind, my own. I mean that to know any fact, X, or form any intelligible opinion about X I must ultimately think X *as it would be* for a mind which was consciously

¹ V above p. 11 ff

aware of it as a present fact though there may never be or have been such a mind. That is the only way in which I can realise it to myself imagine¹ what it is like at all. Thus ultimately we can only think of unperceived physical things in terms of a possible observer in the sense that we must think them *as if* they were objects of actual present experience or rather of conscious perception (a species of cognition). This does not as has often been held necessarily imply that physical things can only exist as objects for an observer for the method is merely a means to deciding what they are in themselves but it may be that it is a necessary means if we are to think them as anything more than either an unknowable x or mere laws governing human experiences.

A similar contention may be put forward even in regard to necessary truths. As far as I can see we can only think universal principles as true *a priori* by thinking them as in some sense necessary for any mind that accepts the premisses on which they are based by thinking of them as such that any mind which realised their meaning would be bound to accept them as true. I certainly do not hold that logical implication is only a relation in the mind but still we can only see that A implies B by seeing that any mind which accepts and understands A must accept B. Like the material world universal principles have a character independent of our minds but we cannot reach that character without thinking them as they would be for mind. Apprehension of *a priori* truth seems to have this twofold nature: on the one hand we apprehend the truth as true whether human minds know it or not; on the other hand we only attain this apprehension of its independent character by thinking of it as also being that which any mind must think. The two features are inseparable for us. Again a conscious or unconscious element in the mind I must either treat as a mere unknowable x or conceive *as it would be* for an introspecting mind. Causal laws and facts of any other kind only have meaning for us in relation to physical or psychological events.

¹ I do not mean make a sensuous picture of it. This is only the way to realise what *some* objects (i.e. objects of sense) not all objects are like. Nor do I mean to suggest that before we thus think it as it would be for a mind we must have knowledge of it of some other sort. All cognition is either a thinking what we cognise as it would be for a mind in order to find out what it is in itself or uses symbols the meaning of which has been at some time or other grasped by a process of this kind.

any metaphysical conclusions But even on the most modest view it gives an important place to the idealist standpoint in knowledge The cognitive process is on one side idealistic on the other realistic it is idealistic in so far as it always involves thinking facts as they would be for a mind as if they existed for a mind realistic in so far as where successful it is always a finding of a reality independent of the cognition of it Our knowledge must be realistic but it can only be attained by idealistic methods We have already seen that if we are idealists we can only produce a view in the least defensible by admitting realism within idealism by admitting that at any rate our particular cognitions are directed to facts independent of these cognitions but it is also true that if we are realists we must admit in the way just described an idealism within realism One of the greatest difficulties of epistemology and one in face of which almost all philosophers have badly failed is to hold these two conceptions in due balance together

§ VII HEGELIANISM AND EPISTEMOLOGICAL IDEALISM

There remains another very important sense besides the epistemological one in which reality is sometimes said to be identical with thought The word thought is in ordinary language applied both to the thinking and to the content thought¹ Now if it is used in the former sense we have a more subjective form of idealism but if it is used in the latter what is meant may be rather that reality is thinkable or intelligible as a rational system than that it is reducible to the thoughts of any particular minds as minds or even of an absolute mind This view is compatible with realism, and its validity turns largely on the question of internal relations and the coherence theory² of truth which will be discussed in Chapters IV and V The contention is not an argument that reality is dependent on being thought by a mind but rather an argument from the logical systematic character of correct thought to the possession by reality of this character

Even if an Absolute be introduced and the real be declared as by e g Bradley and Bosanquet to have no content save experience the Absolute is often conceived not as a mind

¹ I e to what objective truths are thought by us

² While in some senses in which it has been taken this theory implies idealism in others it does not do so

from the use or supposed use by him of invalid arguments of an epistemological character

We need not repeat what we have already said against such arguments. The fact that Hegel conceives the thought impersonally might avoid certain objections but would not make the argument cogent. It has not been proved that mind can only know that in which it itself is immanent and in the absence of a proof of this we have no right to assert that reality because we can know it must be of the nature of thought or must be spiritual. Dr Stace however adds that this argument is also essentially a proof of the objectivity¹ of universals and if we are to save Hegel from these criticisms we must interpret him as meaning to insist not that all reality is reducible to concepts as mental facts but that the logical connections between concepts² cannot be merely subjective but are also present in the real world an assumption which may reasonably be defended as a necessary postulate of thought without involving any denial of realism. Hegel's principal object was undoubtedly to reveal a certain logical structure in reality. The impersonal objective reason on which he lays such great stress may then be conceived as the rational laws and logical connections in the real world. If we wished to harmonise his view with realism we could then say that he conceived reality as intelligible not in the sense that it was present to actual thinking or was itself of the nature of thinking but in the sense that there was nothing real the general nature of which excluded *a priori* the possibility of its being thought by mind (no Kantian thing in itself) and that reality was a system the general principles of which at any rate were deducible *a priori*. We could say that the doctrine that the possibility of knowledge implied the identity of reality and thought meant for him not that because minds can know reality reality must be of the nature of mind but that thought depends on connections of universals and that arguments based on this could not be valid of reality if there were only a logical connection between universals in our mind and not also in reality. For as I have suggested already in talking of thought Hegel had less in mind the thinking than the content thought especially

¹ This does not mean their subsistence separately from any particulars in which they are manifested but their reality as manifested in particulars

² As I pointed out earlier one of the meanings of concept is universal

the cover of *Die Wissenschaften* is it worth what he takes the correction in his *Die*. We must admit that it is hardly possible to interpret Hegel's correction such that the meaning of the one term could not be understood without the other, to a correction such that nothing of what we can think is to be regarded as false, that there is that is not correct. (We can say that it is so if I understand him right.) It is not a matter of the universals and concepts. They are mental unless some specific piece can be given of their nature, that is, for the we do not put ambiguity in the extreme. It may stand both for the conceiving and for what is conceived, and it does not follow because the form is right that the latter is so also. Whether Hegel can be interpreted without introducing is a question in itself, an element of the kind I have mentioned. I feel his commentators to say, but if he is to be interpreted truthfully he must be interpreted in some way like the one just outlined.

Whatever view is taken of my argument and of the merit or demerits of epistemological idealism in general, one must remember that Hegel's *Dialectic* by which he claims to prove through a series of logical steps not founded on cosmology that the ultimate category is what he calls the absolute idea is not necessarily thereby overthrown. It may for anything I have said give a conclusive proof that reality as a whole has a character which might be described as spiritual. But such an argument is not characteristically ideal in the sense defined in Chapter I and is therefore not covered by the present book. Even if Hegel was an idealist, his real greatness does not lie in his idealism. The view that reality is a rational system and the allied coherence theory developed under Hegelian influence constitute one of the most important products of the idealist movement and cannot be thus dismissed, but discussion of them will be postponed to Chapter V.

CHAPTER III

KANTIAN IDEALISM

§ I INTRODUCTORY

WE must now turn to the greatest of the philosophers who used arguments of the idealist type in building up his system and the man who contributed more than any other towards making idealism the dominant philosophy that it has been. For we may follow the ordinary usage and call Kant an idealist because by physical objects we mean the objects of everyday life and science existing in space. These objects Kant treated in a characteristically idealist fashion reducing them to elements in human experience and leaving to the realist only the unknowable thing in itself. Unfortunately we have not here to consider Kant in all his greatness but only in regard to the one aspect of his system which present day students including myself are most disposed to consider unsatisfactory. Nevertheless this aspect must be regarded as extremely important for the history of thought even if we deplore it.

What Professor Kemp Smith calls the subjectivist side is assuredly not the only side of Kant but we cannot possibly gloss over that side. As Professor Kemp Smith admits it is retained throughout the *Critique* and remains untranscended to the end of Kant's work. Kant does definitely hold that we can only know our representations (*Vorstellungen*) that space and time are only forms of our intuition and have no reality independently of us that we can only know what we have ourselves made out of given material by an act of synthesis and he further holds that the confinement of our knowledge within these limits is the main purpose of his system. Kant commits himself to these views as much as he commits himself to any view. They are held by him from the beginning of his critical period to his death and though they may be supplemented are never repudiated. Even when he speaks as a

realist it is always a realism within idealism. This is shown by the fact that in his *Opus Postumum* where he develops this realism most freely he also stresses the part played by our real self in constituting phenomena even more than he does in any other of his writings and ascribes to this self as ground even more of the characteristics of phenomena. And when asked by contemporaries which of his commentators gave the best account of his meaning Kant referred them to Schultz's paraphrase which interprets the *Critique of Pure Reason* in a very subjectivist fashion. Yet Kant had read Schultz's manuscript and given him the benefit of his advice in all difficulties.

§ II KANT'S SOLUTION OF THE PROBLEM OF SYNTHETIC A PRIORI KNOWLEDGE WHY KANT WAS AN IDEALIST

Why was Kant an idealist? Four reasons may be distinguished three of them epistemological¹ in character.

(1) In the first place Kant persistently asked the question why objects should be held to conform to our categories and our forms of perception. Is it not gross presumption to suppose that the laws of our little minds can dictate to reality what its nature shall be? Why should reality be just what we perhaps owing to a mere accident of our psychological constitution must think it? For Kant the only possible solution to this difficulty is to suppose that what we know is not reality but appearance. In that case there is no difficulty in seeing why it should correspond to our laws of thought and our forms of perception for otherwise it could not be known or experienced by us i.e. could not appear to us and therefore could not exist at all since at the most it exists only as appearance.

My answer to the argument is that the question is a wrong one. In knowing something *a priori* we do not, as the form of the question assumes, know primarily how we psychologically must think but what reality is like. It is no more and no less difficult to understand how we can do this than to understand how we can know a law of our own mind. Kant assumes and must assume if his philosophy is to stand that we can have the latter kind of knowledge though he himself admits that there is something very strange about such knowledge. He

¹ Many of Kant's arguments should therefore theoretically fall in the previous chapter but the distinctive character of his treatment is obviously such as to call for separate discussion.

says that it is impossible to conceive how the self can know itself as object thus making even knowledge of the appearance-self highly mysterious while knowledge of the real self he altogether denies. And it would surely be unreasonable especially in view of the critical principles of Kant's own philosophy to assume that we knew enough about the relation between ourselves and other realities to rule out *a priori* as impossible knowledge of these other realities. The assumption often recurring in philosophy that we can really know ourselves but cannot know other things is connected with the unfounded idea of knowledge as identity with the object known. When we come to know that $7 + 5 = 12$ or that an Euclidean triangle must have the sum of its angles equal to two right angles or that M is P and all S is M together imply¹ that all S is P it may be difficult to decide the ontological status of what we are knowing but in any case it is certainly not a law of our psychology. When we see something to be inconceivable what we see is not merely that we cannot think it but that there are different elements in the notion which are incompatible and cannot be combined in the real world. If we do not know this we know nothing at all for mere inability to conceive is not knowledge and our perception of this inability could not give us a universal law even about the self for we could not know whether the inability would last. Certainly if Kant be interpreted as meaning to ask—Does reality conform to the principles which we see to be self evident?—he is asking the absurd question whether we know what we know. To see that a principle is self evident is just to see that it is necessarily true of reality.

As a matter of fact however Kant applied this argument not to logical principles but to the forms of intuition² space and time and to certain categories such as causality which he did not hold to be logically self evident and thought he could only prove of appearances not of reality. The law of non-contradiction he apparently holds to be valid of things-in-themselves while insisting that it cannot by itself give us

¹ In this book I never use *imply* in the sense introduced by Mr Russell but only in the older sense of the term v. p. 172.

² Intuition is of course the usual and etymologically correct translation of *Anschauung*. This word however does not as is well known carry with it any of the usual implications associated with intuition as commonly used in English and in fact stands for some thing quite different. For Kant it means practically sensuous perception in so far as the latter is not explicable by particular sensations.

more than a merely formal and negative criterion of truth¹ though on the other hand his philosophy would imply that mathematics including even arithmetic could not be so valid. And since dreams and illusions are sufficient to show that the mere fact of our perceiving something is not enough to prove that it really exists as a physical object just as we perceive it there is room also in this sphere for Kant's doubt. But the question is still wrongly put for even here the object of our awareness is not a law of our mind a form of our perceiving but a particular content perceived a sense datum or *sensum* as it is now commonly called. That this content is mental cannot in the absence of specific proof be assumed to be the case and unless it is mental what we are knowing is still something real other than ourselves though not perhaps something physical in the usual sense of the word.

But it remains open to doubt whether we are justified in ascribing the characteristics of this content now usually called a sense-datum or *sensum* to physical objects and hence Kant's argument could well be restated to the effect that while there is good reason to suppose that *sensa* have those characteristics which are necessary for them to be objects of experience to us since if they were not experienced by us they could not exist there is no good reason for ascribing such characteristics to a material cause of the *sensa* which *ex hypothesi* can perfectly well exist without being experienced by us. If the argument is put in this way it assumes not that *sensa* are mental but only that they are or for anything we can tell may be dependent for their existence on our experiencing them. Thus stated it resolves itself into two contentions discussion of which will have to be postponed for the present. (a) we can prove the categories to be valid of objects of experience which are dependent for their existence on being experienced but of nothing else. (b) we have no grounds for ascribing to their external causes any of the sensible qualities perceived by us i.e. we must posit things in themselves but have no right to say anything about their qualities on the strength of experience. It was generally supposed that the latter point had already been established in regard to everything save the primary qualities. Kant thought he had established it in regard to the primary qualities also.

These contentions will have to be discussed later but we

¹ *Critique of Pure Reason* B 190 ff. 268 302 329. (In references to this work A stands for first edition B for second edition pages.)

may at any rate rule out now the assumption so important for Kant's philosophy that whatever is *a priori* must be contributed by the mind. This assumption led him directly to the idealist conclusion that everything we know must be made by us (out of given material) since otherwise he was unable to explain how we could know that it must conform to the *a priori* categories without which any knowledge was for him impossible. And it led him to assume that the proof that space and time were *a priori* was a proof that they were subjective.

(2) Kant was an idealist because he was in an important sense an empiricist. It is often suggested that idealists do not do justice to the empirical element in our knowledge but for Kant it was the realist who went beyond experience. To be a realist would be to claim that we have either knowledge or at any rate justified beliefs about the character of things in themselves and such knowledge or justified beliefs could only be obtained by applying beyond experience principles which we can according to Kant only show to be valid within experience. His attack on supposed transcendent knowledge i.e. knowledge of what is not an object of actual or possible experience is not only an attack on dogmatic theologians it is just as much an attack on the realist. If we ask further how Kant established the view that we cannot go beyond experience we find that it is based mainly on his view that only experience can enable us to make synthetic judgments.

Now it is most important that this problem should be discussed both for the understanding of Kant and for the general question. The problem of synthetic judgments is the problem how inferences can follow from their premisses and yet give new knowledge not already assumed in their premisses for though formulated in terms of judgment the question is really one about inference i.e. the justification of judgments. Expressed in colloquial form it is—how can we get out of our premisses what is not already in them? Though Kant's formulation of it is new it was by no means a new difficulty but had been discussed e.g. by Plato in the *Meno*. And there is still an important school of philosophers who deny altogether at least in words the possibility of synthetic inference.

Kant's view was that pure thought must depend entirely on the principles of identity and contradiction and from this he concluded that it could only yield 'analytic' judgments.

which analysed and clarified concepts we already possessed but did not give any fresh knowledge. But it was patent to him that the *a priori* inferences of mathematics did yield genuinely new knowledge and also that such a principle as causality was synthetic for the cause is different from the effect and therefore cannot be reached by a mere analysis of the effect or *vice versa*. Hence he was driven to the conclusion that neither the truths of mathematics nor the *a priori* principles necessary for natural science could be established by pure thought without reference to experience. Yet he realised equally the impossibility of establishing either mathematical knowledge or the general principle of causality empirically, i.e. by generalising from the observation of particular cases. The problem was then to find a way of establishing them by experience otherwise than by generalisation from particular experiences. This was solved by the doctrine of *a priori* intuitions. Space and time were sensible and yet *a priori*; that is they had the quality of being perceptual and not merely conceptual and yet they were presupposed in the case of space in all experience of physical objects in the case of time in all experience whatever in such a way that we could know *a priori* that the characteristics which we found in space and time were true of that experience in general. This enabled geometry to be both *a priori* and synthetic—synthetic because it was based on something sensuous *a priori* because space was presupposed in all outer (physical) experience and therefore the objects of this experience had to conform to geometry if they were to be experienced at all. The justification of the *a priori* concepts (the categories) though different has a certain similarity. The reason why we know these to hold of all appearance is according to Kant because they are implied in the sensible intuition of time being deducible from the very notion of any possible experience in time. This solution since it only justifies synthetic *a priori* judgments within experience *ipso facto* forbids us to assert them beyond experience.

Kant's solution would find little favour nowadays with mathematicians whose general opinion would be that the modern development of the science shows the *a priori* character of geometry, in so far as it is *a priori* to be based on logical concepts and not on the actual sensible character of space as present in our experience, but geometry is of course only an instance of the method though an instance which Kant makes

very prominent. In general Kant's attempt to solve the problem of synthetic judgments breaks down before the following difficulty. If he is to maintain his position that the synthetic element is due not to thought but to sensuous intuition he is logically bound to ascribe all novelty in geometry everything that cannot be accounted for by merely analytic judgments to the literal sensuous seeing of new qualities in our pure intuition of space.¹ He does not say this in so many words. If he had formulated it in this way he would have no doubt realised the difficulties involved. But this is the position to which he is logically committed and his statements at least imply this. He attaches the greatest importance to the fact that we can draw figures in geometry and actually see new properties in the figure. If this were a perception of one particular object among others it would not yield any *a priori* conclusions but since it is an intuition which accompanies every experience of external objects we know according to him that whatever characteristics are given in this intuition must hold of all such objects without exception. For such objects cannot be experienced by us except in space and therefore must conform to the nature of space. But we may object what then becomes of the *inferences* in geometry? If Kant's solution were correct all geometrical proofs would have to be effected not by inference at all but by observation of the figure or better of the pure intuition in our mind which is exemplified in the figure the inference only serving as an analysis of what we see there. But in a geometrical proof we do not realise e.g. the angles of a triangle as actually equal to two right angles (no measurement of angles to find their empirical size occurs in the proof) we see in the non-sensuous sense of seeing that being a Euclidean triangle entails having angles equal to two right angles.² This cannot be explained

¹ Kant's view of space and time in the *Analytic* is not altogether compatible with that in the *Aesthetic* and his admission that the apprehension of even time and so presumably space presupposes a synthesis and categories is inconsistent with the solution of the problem of mathematics discussed in these pages. But he never worked out a solution in terms of his later view and never seems even to have realised that it was inconsistent with the account of geometry given in the *Aesthetic*.

² Whatever doubts may be cast on this proof it undeniably follows if Euclid's postulates are granted i.e. it is true as a hypothetical proposition about Euclidean triangles. But it is only mentioned as a familiar example and not on its own account.

by sensible intuition for entailment is not a sensible characteristic which can be literally sensibly seen. The theory would likewise not give necessity for we could still only see in this way that the angles were actually equal not that they were necessarily equal. Yet Kant's chief aim was just to account for the necessity of mathematics.

If I might venture to make such a suggestion in the case of one of the greatest philosophers of history it seems that he was misled by a confusion between two different cases of necessity. Granted that the theorems of pure geometry are true of space and that external phenomena can only exist in space it follows necessarily from these premisses that any proposition validly proved in pure geometry is true of external phenomena and this would as far as it goes solve one of Kant's problems i.e. granted that pure geometry is valid what right have we to apply it to concrete physical objects. But it would not solve the other problem which he does not separate adequately from this one namely how is it that the proofs in pure geometry are themselves necessary i.e. follow validly from their own specific premisses or from the geometrical system as a whole irrespective of whether that system can be applied to objects or not? While his account explains the necessity of objects conforming to the conclusions of geometry whatever these be it does not explain the necessity by which the conclusion of a theorem in geometry follows from its premisses though admittedly not contained in them. Yet this is just the problem of synthetic *a priori* judgments with which Kant had started his quest.

It would be still more difficult to defend a corresponding view in regard to other branches of mathematics and in particular Kant has not attempted to work out a theory of arithmetic which one would have thought essential to his purpose of justifying synthetic *a priori* judgments.¹ We may note however that the same objection applies to any attempt to base arithmetic on the intuition of dots on paper or on counting on one's fingers or even on some intuition of time relations possibilities which Kant suggested.

We must not suppose that Kant would have stated his view in the crude form in which I have stated it. My contention is not that he said that the conclusions of geometry were based simply on observation of images e.g. of triangles

¹ He definitely asserts that arithmetical judgments such as $5 + 7 = 12$ are *a priori* synthetic.

which he certainly did not but that he could not solve the problem of synthetic *a priori* judgments by his method without really implying that this was true though he did not realise that his method had this implication. This was veiled from him by the over subtlety of his language and thought.

Kant speaks of reaching the conclusions of geometry by a chain of inferences guided by intuition¹. But precisely how does intuition solve the problem? The difficulty is that we can from A infer something not included in the concept of A but how the fact that the premisses are intuited sensibly can make it any more intelligible that they should imply something beyond themselves is not clear. To put the objection in another way Kant is involved in the following dilemma. Either he must maintain that it is merely a case of sensible intuition i.e. of literally seeing the new properties in the figure we have drawn or in some ideal figure in which case it is not an inference at all and certainly neither *a priori* nor necessary or he must admit that over and above the intuition there is an inference in which case the inference can only be valid if it is possible for a premiss by its own nature to imply something beyond itself and this implication cannot be intuited sensibly and contradicts his view of pure thought as analytic.

In the case of the categories it is still clearer that the proof of them by reference to experience in time does not remove the problem of synthetic inference. Time may be sensible but since sensible intuition does not as such give substance and causality there is still a synthetic inference required that succession in time implies the categories of causality and substance and if the inference is valid its synthetic character is due to thought. What is to be explained by sensible intuition is not the inference but the premiss the fact of succession in time. Thought alone can tell us that from this premiss there follows a further conclusion. For Kant does not mean simply that e.g. causality is found by analysis to be present in our experience (that would have enabled him to dispense with a proof of the categories) he means that they are implied in other characteristics of our experience i.e. specially its temporal character and that is why he can and must give a proof of them by inference. But the fatal objection to Kant's solution of the problem of synthetic *a priori* judgments is that it really leaves no room for inference at all.

¹ *Critique of Pure Reason* B 744-5

Kant also suggests that a synthetic *a priori* judgment can be valid if and only if there is some third factor which includes and unites its subject and predicate¹. This third factor is experience in time. A and B are thus linked together because they are both included in C. The doctrine might be developed in a way which approximates to the Hegelian solution but it does not avoid the dilemma of Kant. For there are two alternatives: either A and B are just seen to be *de facto* present in C, or A is seen to imply B through the mediation of C. In the first case the connection is merely empirical; in the second case the problem of synthetic inference is only put further back by the introduction of C. No interpolation of a third term C will enable us to make a synthetic inference from A to B unless there is a synthetic inference possible from either A to C or C to B or both.

All the same I think it true that pure *a priori* judgments, i.e. judgments which contain no element given in experience², are impossible. I should indeed go further in this respect than Kant does, since he regards certain judgments belonging to the study of formal logic as purely *a priori* and conceptual though for that very reason analytic. It does seem to me however that even formal logic involves an empirical element. For it presupposes at least previous experience of what thought and judgment are. If we had not had that experience we should not understand in the least what was meant even by the formula *S is P*. Similarly arithmetic involves an empirical element, namely the experience of numbered things or at least of order, not *in abstracto* but in particular cases, just as logic presupposes the experience of particular judgments and for most branches of it inferences. Logic may in a sense deal with form not content, but to comprehend it we must have first experienced the form in particular cases of judgment. To try to judge without using anything derived from experience would be like trying to build a house without any bricks or other building materials. Even analytic judgments would be impossible without some content, however meagre, for them to analyse, and such content must ultimately be supplied by experience.

Id. B 194

² Including in experience perception of oneself which is as much empirical as perception of the physical world, also experience of universals in particular instances. Without universals any recognition or perception of objects would be impossible.

On the other hand I agree with Kant that some of our concepts are non empirical if by this is meant that we have knowledge of some universal characteristics or relations¹ which cannot be discovered by mere analysis of what is observed or be reduced to characteristics or relations thus discoverable. Some indubitable examples are the relation of logical entailment (v Kant's necessity) the fundamental ethical notions and the notion of probability. Only I think that this presupposes our first detecting the presence of these characteristics or relations either in particulars empirically given or at least in universals derived by abstraction from such particulars. If I had never had a particular experience which I apprehended as good I could have no knowledge of the characteristic goodness nor could I possibly know what logical entailment was if I had not seen instances of such a connection between universals which are present in empirical particulars and thus made specific judgments which involve this general logical notion (e.g. that X and Y cannot both be speaking the truth because they said that Z was in different places at the same time or that there are now seven chairs in the room since I have brought in two and there were five there before).

The *a priori* character of mathematics and logic need not consist in dealing with purely *a priori* concepts. It may consist simply in the fact that their conclusions follow *a priori* from the concepts with which they start though these are derived from experience. Kant was wrong in saying that geometry was *a priori* because space was *a priori*. Whatever be the truth about the source of our perception of space the science can still be *a priori* if and in so far as it unfolds what the nature of space (or on the newer views certain kinds of order) implies logically. Even the metageometries that claim to have no reference to perceived space must presuppose some experience of some kind of order. Kant only escaped this conclusion because he regarded space and order in general

¹ By this I mean to assert both (1) that we are aware of them know what they are (2) that there is something of which we can truly predicate these characteristics or in regard to which we can truly assert these relations to hold. Such characteristics or relations would be discovered in the real in the first place by what Professor Broad calls non perceptual intuition (*Examination of McTaggart's Philosophy* I p. 51) though our knowledge which objects they belong to may subsequently be extended by inference.

cannot justify the ascription to any objects of characteristics which are not either the same as or definable in terms of characteristics experienced by us. This limitation in our knowledge of matter must be admitted by the realist but it is quite compatible with holding that we are justified by causal inference in accepting as a probable hypothesis the view that characteristics of the same kind as some immediately perceived by us qualify some objects even when unperceived. I am not contending here that this has been established only that it cannot on Kant's grounds be ruled out *a priori* as for ever incapable of establishment by us.

Nor does the presence of an empirical element in all our judgments necessarily rule out the possibility of reaching conclusions by *a priori* inference about reality or at least about some factors in the real world which are independent of our thinking or experiencing them. For the empirical content given may and if inference be possible at all must sometimes have features which lead beyond itself. We may see that A implies B in a given case and realise that this is not due to the particular features of A but to some universal which it has in common with other things and we may then be able to see that this universal would imply B in all cases whether experienced or not. Or to put it in another way we may see that what implies B in a given case is neither the particular A-ness of A nor the fact that it is an experienced and not an unexperienced A but some generic property C and in that case we obviously have a right to assert that C always implies B whether C is experienced or not since being experienced is not included in the premisses of the inference. I discover by considering a particular triangle that its angles must be together equal to two right angles and I see that in making this inference I have included in my premisses neither the particular size of the angles in this particular figure nor the fact that I or anybody else have seen the triangle therefore the inference is valid of all triangles whether perceived or not. This does not rule out the possibility that there might be other reasons on account of which it was impossible for triangles to exist unperceived but the fact that I have seen my conclusion to follow from premisses common to all triangles and not including the premiss that I have perceived the triangle justifies me at least in holding that if triangles do exist unperceived my conclusion must still apply to them. Yet both this triangle and the fact that its angles are equal to two right

angles are essentially empirical data.¹ In this way I can ever reach a conclusion about everything in reality, namely that nothing is both triangular and possessed of angles the sum of which is greater or less than 180 degrees. Further in formal logic we see e.g. that no true judgments can be self-contradictory and this implies that all reality must be self-consistent though the notion of judgment itself involves empirical content.² We may be able to see *a priori* that a principle holds universally connecting two terms though we could never have come to know what the terms were without in some previous instance having experienced them or elements to which they could be reduced. We may even be able to see that everything which exists must have a certain formal property though we should not have known that property save through experiencing it in particulars provided when we have come to know it we see that its absence would be logically impossible as is the case with self-consistency. That we can arrive at many such true affirmative propositions about all that is I am not asserting but there is no general *a priori* objection to the possibility of doing so.

It would be different if as Kant held no synthetic *a priori* judgments could be proved except of appearances (or seen to be self-evident without this reservation). But we have seen no reason to accept the premiss from which this conclusion follows since as has been argued above the problem of synthetic judgments is not really eased by introducing a reference to experience.

It might still however be the case that the specific proofs of the categories given by Kant were valid only for appearances and that it was impossible to justify the application of the categories to things-in-themselves either by a proof or by the mere realisation that they were self-evident. Kant based this view on the contention that he could prove the categories only by showing that we could have no experience of anything which did not conform to them. Such an argument was decisive in the case of appearances because appearances could

¹ If it be objected that only approximate and not perfect triangles exist empirically we may take an arithmetical instance. The inference we draw to the effect that $5 + 7 = 12$ is valid also of non-experienced objects if there are any such because in order to make it we do not need to include in its premisses any statement about being experienced though it does not of course prove that there are any non-experienced objects.

² All this is not meant as a criticism of Kant but as an account of my own position.

not exist at all without being experienced by us and therefore must conform to the conditions without which they could not be so experienced but it seemed to be totally devoid of cogency when applied to things-in themselves. For what did it matter to these if we could have no experience of them? Hence Kant argued that the categories could not be proved of the real world and that therefore since all our judgments presupposed the categories we could have no knowledge or even justified probable opinion concerning reality¹. Kant held that his idealism was required by physical science itself since it provided the only basis on which the indispensable presuppositions of the latter could be justified.

It would then be an argument in favour of the view that we can only know appearances if this view provided the only foundation from which we could build up a proof of the categories. It would not be by any means a conclusive argument for we cannot be sure that a theory must be true just because it would if true provide a premiss from which to prove something else which we think to be true but cannot prove otherwise but it would increase the probability of the view since the impossibility of proving certain categories especially causality combined with the necessity of accepting them has long been a serious difficulty for philosophers. We shall see however that even this cannot be admitted.

Kant's attempted proof of the categories follows two main closely connected lines both of them intended to establish the conclusion that the categories are necessary if we are to have any knowledge² of events in time. The first is simply to the effect that even the most elementary judgment involves some organisation and unity and that this organisation and unity which must therefore be regarded as a necessary presupposition of all our knowledge is impossible without the categories. I am inclined to think myself that the argument for causality at least the chief of the categories is substantially valid but we need not here discuss its validity. All we need point out is that if it is valid the same argument applied to independent physical objects will also be valid for the realist.

¹ The only reservations which Kant makes concern certain judgments based on ethics and do not provide a loophole for the physical realist.

² Kant says necessary for experience (*Erfahrung*) but expressly identifies *Erfahrung* with empirical knowledge (*empirische Erkenntnis*) V *Sieben kleine Aufsätze* I (Hartenstein IV p 499) *Critique of Pure Reason* B 147 218.

while if it is invalid it will obviously make no difference to the question. Kant argued that we could only know appearances not things in themselves because we could only prove the categories of the former not the latter but this argument falls to the ground either if we cannot prove them even of the former or if we can also prove them of the latter. In any case since it is not really possible to avoid accepting the principle of causality at least in regard to phenomena in some form which enables us to pass from observed to unobserved events (Kant's or the idealist's possible as opposed to actual experiences) it is reasonable to accept it also as applying to things in themselves unless there is some special ground for limiting it to the former such as Kant thought he had supplied. Now Kant's line of argument does not provide any such ground so far as I can see. If it is valid at all Kant has proved that *all* judgments about events or objects in time presuppose the categories and in that case if judgments about physical objects existing independently of us are held to be justified on other grounds they will also presuppose the categories. This is no argument for realism but it does show that if realism be established on other grounds Kant's proof of the categories can provide no counter-objection even if successful but rather a proof that if realism is true the categories apply to independent physical objects.

Secondly Kant argued that the distinction between physical objects (at least as appearances) and merely subjective representations is necessary if we are to make any sense of our experience or even to be aware of it as ours and that the notion of physical objects thus shown to be necessary can be interpreted idealistically (i.e. consistently with the other principles Kant thought he had proved) only if we presuppose the categories. But it seems clear that if on the idealist view the notion of a physical object implies the notion of a system of actual and possible experiences and therefore the categories the notion of a physical object on the realist view must equally imply the notion of a system of experienced and experienceable physical states and if the one system involves the categories¹ so will the other.

¹ The categories whose proof is given are *substance* which consists in the principle that there are permanent objects in space and therefore if valid at all favours realism rather than idealism with which it can only with great difficulty be reconciled *reciprocity* (universal interaction) which can be regarded as a species of causality and *causality* itself. So what is really at issue here is causality.

Whether Kant's admission that in order to make any sense of our experience we must introduce the conception of physical objects in distinction from merely subjective representations and treat these objects as substances i.e. treat them at least *as if* they were independent permanent things does not itself logically lead to realism is a moot point. Certainly if the coherence test be accepted it must because if Kant is right in this greater coherence is gained by admitting these objects but Kant himself nevertheless continued to treat them only as working conceptions and never admitted that objects in space could exist independently of us.

Here we must digress slightly to touch on a point of very considerable importance. Kant's proofs were epistemological in character or as he called them transcendental that is they were arguments to the effect that certain principles must hold because without them all knowledge or at least all knowledge of the kind we have would be impossible. Now it has commonly been assumed that such arguments presuppose idealism and are only possible for the idealist. Consequently it is usual for realists to deny that epistemological considerations can be of any importance for determining the nature of reality except negatively as refuting the arguments of the idealists. Because they have accepted the view that reality is quite independent of our knowledge of it they are apt to conclude that a study of the nature and conditions of our knowing cannot lead to positive conclusions about reality at all. No doubt there is some health in the realist claim that epistemology should be degraded from its position with many idealists as the fundamental philosophical discipline¹ but it is important to realise that the rejection of idealism does not by any means put an end to the possibility of important metaphysical arguments based on epistemological considerations.

It does not do so because, if we know something A in fact and if we can show that it is only possible to know what possesses certain properties it clearly follows that A must possess these properties even though it is quite independent of and unaffected by our knowing it. *Ex hypothesi* we know A and we could not do so if it did not conform to the conditions without which knowledge would be impossible. The fact that we know it need not determine or affect its nature,

¹ V e.g. *The New Realism* p. 45 ff.

but yet this fact obviously and certainly implies that it must independently of our knowing it be of such a nature that we can know it. Therefore if any principles can really be shown to be the conditions of all knowledge and all judgment these principles must hold also of the objects of the realist for what I have just said obviously applies to probable opinion and to all judgments as well as to knowledge. If realism is true some affirmative judgments about independent physical objects are justified therefore any principles without which these judgments could have no validity or meaning must also be accepted as true of reality. Kant said. These objects could not exist without being known by us they could not be known by us unless they conformed to the categories but they are known by us and so exist in the only way in which they are capable of existing therefore they do conform to the categories. The realist could say. These objects are known by us in fact or at least are objects of justified probable judgments they could not be objects of knowledge or of such judgments unless they did conform to the categories but to repeat they either are known or are objects of such judgments therefore they do conform to the categories. For though physical objects may exist without being known by us they assuredly cannot be known without being known or justifiably judged probable without being so judged and therefore any conditions which epistemology may show to be presupposed in knowledge and judgment will hold of them. It follows that epistemology may be of metaphysical importance as a clue to the nature of reality not only for the idealist but also for the realist though its importance has been exaggerated by Kant and his adherents.

Unfortunately Kant did not realise this and assumed that the categories could only be proved if his system of idealism were accepted. He assumed incorrectly that the transcendental method¹ involved transcendental idealism and that we could only argue from the principles governing our cognition to the nature of the object cognised if in the course of cognition we made these objects. Here we may trace the influence of Kant's view mentioned earlier that to apply² the categories to real things independent of us was equiva-

¹ I.e. the method of proving the categories by reference to the possibility of experience (empirical knowledge)

² Except in a modified sense mentioned later

lent to an arrogant assertion that reality must conform to the laws governing our minds but in this he was confusing psychological and logical necessity. As I said earlier the categories if known at all are known primarily not as laws of our thought but as laws of the object about which we think.

(3) Kant was an idealist because he believed that knowledge involved an act of synthesis by which the mind made or put together the object known by us. Like so many of his predecessors he found it impossible to conceive relations as given by sensation and therefore he attributed them to the mind. At the same time he realised that we had no conscious experience of anything totally unrelated and unorganised so he by implication put the act of synthesis outside our conscious life. The admission of a synthesis in this sense however made it impossible for him to abandon idealism. For we obviously could not synthesise things in themselves and since all combination (*Verbindung*) according to him came from the mind Nature was only a unity because we had ourselves put it together and so made it what it is. The synthesis was responsible at least for all the order in our world therefore this order was only the work of our mind and only phenomenal. But if so the whole of our world was in this position for if you took away all order there would be no world left nothing thinkable intelligibly by us but only a manifold more chaotic than the wildest dream.

This is not the whole truth about Kant's account of the synthesis for besides being an account of the act by which we were supposed to make the phenomenal world it was also an account of our mode of consciousness of the world as it now is and an affirmation of the unity of our knowledge and the unity of the world and in this capacity it may be of more value even to the realist. Both lines of thought are embodied in Kant's view of the synthesis and both are regarded by him as valid. The account of the synthesis is both an account of the way in which the phenomenal world has come to exist if we may be allowed to use the past tense about something that according to Kant is not in time at all and an account of the world and of our knowledge of it as it now is. What he says may be true of the unity of our consciousness and of our modes of knowing as facts of experience and yet not true of a supposed act by which

we made the known world. Viewed as such an act the synthesis will be open to serious criticism from the realist. Here we have the doctrine that knowing involves making the object known in a specially difficult form.

Unfortunately Kant does not tell us how he derived the proposition that combination can only come from the mind. It is clearly synthetic not analytic and as such requires justification. It is open to the further objection that even if we can regard the categories and forms of perception as imposed by the mind we have to account for e.g. the spatial and causal relations of particular things by reference to the given manifold as Kant admits and this is to say that the manifold is already at least implicitly related. But implicit relation is after all a relation therefore in that case all relation does not come from the mind. Further Kant does not explain why the synthesis must be regarded as a construction of the objects themselves and not merely as preparing or enabling us to come to know objects independent of it. No doubt the explanation is in the main what I gave as the first reason for his idealism i.e. that it would be dogmatism to take the latter view for it would involve the claim that reality must conform to the laws of our thinking. The general view that knowing is a kind of making or presupposes the making of its object by us has already been criticised in the second chapter of this book but in the form professed by Kant it is open to the further objection that the account he gives of the synthesis is quite inconsistent with his own system of philosophy. For if the synthesis is itself phenomenal it cannot be the ground of all phenomena and if it is not phenomenal it must on Kant's own principles be unknowable by us. Yet Kant professes to give a quite definite account of its nature. He distinguishes various syntheses (or different aspects of the same synthesis) and ascribes them to certain faculties implying that he is saying something very important when he says that e.g. the synthesis is due not only to imagination but to understanding. Besides even if he had confined himself to the assertion that we make everything we know by a synthesis of a given manifold in which our mind applies to it the categories an assertion absolutely necessary for his theory of knowledge he would have committed himself to a definite view about what happens in reality quite incompatible with his principles of agnosticism.

Now I shall later have occasion to defend Kant against the well known charge that he is inconsistent in applying the categories to reality and I shall do so by pointing out that while he does deny all definite knowledge of things in themselves he does not mean to deny the possibility or legitimacy of an indeterminate formal kind of thought about them so it might be suggested that his position in regard to the synthesis could be saved in the same way by understanding him to maintain the statements I have mentioned not as definitely established doctrines but as an indeterminate analogical way of thinking which will yet give us some idea of the truth. But though this line of defence is justified in regard to certain other of Kant's doctrines in the case of the synthesis it will not hold. For Kant inserts the account of the synthesis in the middle of what he thinks to be the best established results of the *Critique* and makes no distinction between it and the rest of the transcendental deduction which he certainly regards as proved in the fullest sense of the term and as giving not regulative ideas but definite knowledge. In A XI while admitting that the account in the first edition of the faculties involved in the synthesis may *seem* like a hypothesis and mere opinion as opposed to knowledge he says that it is not really so. The bold claim to certainty for the whole of his philosophy made just before¹ and repeated elsewhere is thus meant to hold for his account of the synthesis though he admits that it is of less importance than the objective deduction. No difference is ever mentioned in respect of certainty between it and the rest of Kant's philosophy and Kant actually claimed for his philosophy a certainty like that of mathematics thus outrunning altogether the comparative modesty of most modern philosophers. We may note further that in order to make possible his account of the synthesis sensations have to serve inconsistently both as elements in the phenomenal world and as material out of which this whole world is made by us. But the element of value in Kant's account of the synthesis can be saved by confining it to an account of the actual processes by which we come to know a reality independent of us since this does involve a species of synthesising though not a making of the objects known by us.

¹ A IX

§ III ARE SPACE AND TIME MERE APPEARANCES?

The fourth reason for Kant's idealism is supplied by the antinomies which drove him to the conclusion that space and time if taken as real are riddled with contradictions since it was impossible to conceive the world in space and time as either infinite or finite. I do not propose to go into the difficulties raised about space and time. The new logic inspired by mathematics claims to have shown that these difficulties are really illusory and this may well be the case though I am not perfectly sure myself whether it has shown very much more than that infinity can be successfully treated mathematically. What I shall try to show is that even if the contradictions be as serious as Kant held any attempt to solve them by making time and space appearances in Kant's sense is untenable.

Kant's solution consists in saying that the alternatives given are not exhaustive for the world is neither infinite nor finite in space and time, since it is not given as a whole in space or time at all. The natural world according to him only exists as appearance that is as a set of actual or possible representations in human minds. Now it is obvious that there are not an infinite number of actual representations therefore the infinity can only apply to possible representations but since these are never all realised the problem does not arise at all. The world is still infinite in the sense that it can be divided and extended without limit in space and time not in the sense that there ever are or have been more than a finite number of actual events realised in it. This solution is not in Kant's form at least available for the realist because the latter is driven to hold at four different points that the whole of an infinite series is actually realised. He must hold it (a) in regard to past events in time since all events that are past must have already happened and these events together form an infinite series (b) in regard to the extent of the physical world in space (c) in regard to the divisibility of matter in space since any physical space includes an infinite number of smaller spaces and therefore the same applies to the things which occupy space (d) in regard to causation for an event cannot occur unless all its causes have first occurred and these form an infinite series reaching backwards into the past. Points (a) and (b) give rise to the first antinomy (c) to the second (d) to the third and fourth

The solution is often criticised on the ground that Kant fails to solve the problem of infinity but only removes it to another realm since the appearances still remain infinite. But Kant would reply that this does not present the same difficulty as if independent physical things were infinite. For the difficulty lay not in the conception of infinity itself but in the actual existence of a completed infinite and appearances do not exist as independent things but only as actual or possible objects of experience therefore they need only be infinite in the sense that we could always find more if we continued to look for them not in the sense that there is an infinite number actually there at any time since an infinite number is never actually experienced. Thus if we adopt Kant's view we may say that all physical objects are infinitely divisible since we know we shall never reach a smallest part in dividing them beyond which it would be logically impossible to go but we need not for all that suppose there are an infinite number of parts present in them for the parts only exist as we experience them and in any actual division we can only experience a finite number of parts never an infinite. We may assert that the world is infinitely extended in space and past time ¹ in the sense that so far as the nature of space and time is concerned the regress to remoter objects in space and earlier and earlier events in time can always be continued not in the sense that matter actually extends to an infinite distance or that an infinite series of events has actually occurred in past time.

But the solution still seems to me to break down because while it does not involve the infinity of the appearances it involves the combination of a finite series of appearances with an infinite space and time that is just the combination Kant had rejected in the antitheses as impossible ² except that he has substituted for independent reality real appearances. For while phenomena are now finite except in a potential sense phenomenal space and time or space and time as given in intuition according to him are still infinite and if they were not the view of Kant that any

¹ Kant does not think that the infinity of future time gives rise to an antinomy. Nor does he base an antinomy on the infinite divisibility of time though he might well have done so.

² In the statement of the antinomies he assumes as incontestable that space and time themselves are infinite whatever be the case with events and objects in them.

particular space or time implied the one infinite Space or Time would collapse altogether

The difficulty is especially obvious in the case of time at least unless we adopt the incredible view that past events never occurred at all even as appearances. It may be possible to hold that physical phenomena only exist in our regress to them but the corresponding view about the past is surely impossible. To say that the past only existed in our regress to it would be to say that the past only existed in the mind of somebody who looked back upon it in the present in other words that there was no past at all. I would not mean merely that events which appeared past to us had really occurred non temporally for according to Kant's view the nature of phenomena gives us no clue whatever to the nature of reality. There would on that view be a reality behind them but the actual events we seem to remember or anything in the remotest degree similar to them we should have no justification for supposing in the slightest degree likely to have occurred at all. Now Kant himself does not in fact believe that there was no past at all. He evidently believes that there were at least as real appearances actual past experiences of human beings but in that case he has not solved the problem. For any such series of experiences would itself have to be either finite or infinite and either alternative Kant has already condemned as self contradictory. If we do not admit at least some past experiences as real experiences we could have no ground for any scientific judgment but if we admit them as real experiences the first antinomy arises again.

A similar difficulty I think also arises in regard to space. Everything in space or time is according to Kant appearance and the appearances must fall into two classes what is actually experienced and what is only an object of a possible experience. The latter class of appearances only exist in a potential sense that is only exist in the Pickwickian sense that they would exist if certain events which did not in fact happen had happened (i.e. if there had been an observer present when in fact there was no observer). Now if the number of actually experienced appearances in space at any given time or in past time as a whole were infinite the antinomies would not have been solved. But what happens if, as Kant held, it is finite? We must note here that Kant's objection to the view that the real world

is finite was simply that space and time are in any case in finite and therefore a finite world would be surrounded and preceded respectively by an infinite empty space and time which to him was inconceivable. Thus the antinomies would not have arisen at all if it had not been for the assumption that space and time themselves whatever is the case with matter are infinite. They only arose because a finite space or time seemed inconceivable except as part of a Space or Time stretching to infinity. But this assumption if correct at all cannot be discarded when he makes space and time appearances. Space and time are still present as real elements in our experiences and therefore if the notions of space and time really involved infinity before they will still do so now. Kant in fact does maintain definitely in the *Aesthetic* that space and time as intuitions are infinite¹ and he does not question this assumption here or anywhere else in the *Critique*. The question is always about the infinity of the physical universe not of space and time themselves. Hence the finite actually experienced appearances must still occur in an infinite space and time while the potentially experienced appearances do not occur at all but only would occur under certain conditions. But if so does not the same antinomy arise once more? Kant might say that it did not because the infinite space and time are only there in a potential not in an actual sense but in that case his original assumption that space and time must be infinite is false. To say that they are potentially infinite is not to say that they are infinite at all. At the most it would be equivalent to saying that they would be infinite under given conditions as infinity is interpreted by Kant in regard to appearances it does not seem to mean even this but only that while the total experience we can have is always finite it may always increase and can never include an experience of one particular kind namely the experience of an absolute limit. Hence either the original assumption of the antinomy i.e. that space and time are infinite is false in which case there is no antinomy even for the realist or the appearances occur in an actually existent though phenomenal infinite space and time and the same difficulty arises again. If any particular space does not imply actual spaces beyond itself *ad infinitum* and similarly with time the antithesis of the antinomy collapses if it does imply this the particular spaces and times which

occur in my representations likewise do so. If space and time must be conceived as actually infinite the only escape from the dilemma would be to reduce space and time to the rank of mere illusion and deny that anything spatial and temporal was real even as a representation which was certainly not Kant's intention and would plunge us in absolute or almost absolute scepticism. We should have to deny not only independent spatial objects but even that we have spatial images or see anything spatial whatever. If on the other hand Kant can really avoid the difficulty by saying that it is a potentially infinite and not an actually infinite space and time which are implied in our experience the difficulty can be in the same way avoided by the realist.

But even if these objections were invalid and the antinomies were clearly insoluble by the realist Kant's solution as a whole would still lead to difficulties greater than those he sought to avoid. Kant maintained that we could have no knowledge of reality but that we could have real knowledge of appearances meaning by appearances what we experience under given conditions. But if so we know something real in time namely our experience and time must be accepted as real. To say that something is an appearance is at least to say that we really experience it. It is essential to Kant's philosophy to maintain both that we can have real knowledge of appearances and that we can have it *only* of appearances but the two positions are incompatible. For what is from one point of view an appearance as only our representation is *per se* a reality equally with the physical objects of the realist for even mere representations are real.

If we might make a digression this brings us to the fundamental difficulty of all views which deny the reality of time in the sense in which Kant denied it.¹ Even if time be ultimately unreal it cannot be disputed that things at least really appear to us in time but this is to say that something real namely our experience really is in time. We cannot rid ourselves of anything by calling it appearance if it is anything at all even only an experience it is such still falls within the real. The same applies to space though this has

¹ Note this reservation. I am only discussing the view that space and time are mere appearances in a sense of appearance which would make appearance fall outside reality not in the Hegelian or Bradleyan sense according to which appearances are subordinate elements in a reality imperfectly understood.

been less frequently noticed for even if it be the case that there are no external spatial objects existing independently of human perception it assuredly is the case that some immediate objects of our sense experience really have spatial properties. The red patch that I see now may not exist apart from my experiencing it but it is still real and really spatial when experienced by me. It follows that if there are self-contradictions in our notion of space and time they cannot be removed by making space and time appearances for appearances in their own place are real enough.

Advocates of the unreality of space and time have not usually realised this fully¹ once they realise it they must choose between giving up their arguments and maintaining frankly that we are under an illusion not only in supposing that independent physical objects are spatial and temporal but in supposing that we experience anything spatial and temporal at all. This heroic course is adopted by McTaggart. He is actually prepared explicitly to maintain that we never see anything which has shape or size and that we never have temporally successive experiences² but only seem to do so. The majority of philosophers would hold in extreme opposition to this that we can never be in error at all as to our immediate present experiences³ but I think that this is going too far and that McTaggart is right in contending that some misperception of present experiences may occur⁴. But while I am prepared to admit slight errors or illusions it seems to me utterly impossible to admit that the error and illusion is as far reaching as all this⁵. If it is all em

¹ Even Kant did not fully realise it. If he had done so he could not have maintained the possibility of real knowledge of appearances.

² And immediate objects of present experience.

³ The difficulties of introspecting correctly should be quite sufficient to convince us of this even when we have made ample allowance for mistakes due to verbal ambiguity faulty memory etc.

⁴ How much error and illusion it is reasonable to admit in them is a question of degree but so are a great many other questions. It seems clear to me personally that while there may be some degree of illusion about some matters we cannot reasonably admit the presence of such an amazing extent of illusion as McTaggart does. We can obviously be confident or even certain that so much illusion as all that is impossible without being able to state with anything approaching exactitude what is the maximum possible degree of illusion. Nobody would contend that because I do not know exactly the maximum number of cups of tea that I could drink per day on the average without harming myself physically I have no right to assert that a thousand cups a day would be too much.

irical judgments ever made are wrong to an enormous and incalculable extent in fundamental points and this seems to me quite incredible. He claims to have proved it *a priori* by showing that there are contradictions in the notion of time but even if I could detect no fallacy in his argument which is not the case it would seem to me a very much more likely supposition that there is some undetected mistake in his reasoning than that all our empirical judgments are mistaken. If his argument were accepted we must abandon science since if we can misperceive to such an extent we can have no right to put the slightest trust in those perceptions of the objects of immediate experience on which all science outside mathematics is ultimately based. If we can perceive all or most of our *sensa* as spatial and all our experiences as temporal when they are not really spatial and temporal at all then we can no longer rely on our perceptions of our own experience and *sensa* in any respect and the empirical basis for any prediction or scientific generalisation has disappeared especially as the other characteristics of *sensa* and experiences are inseparably bound up with their spatial and temporal character respectively and could not be in the least like what they are if these were removed.

I shall therefore claim exemption from the task of discussing at length the numerous attempts to discover contradictions in the notions of space and time. Such attempts provide interesting and important material for philosophical consideration but I am convinced that while it is one of the most difficult tasks of philosophy to arrive at a right understanding of the nature of space and time the solution cannot lie merely in declaring them to be appearance. This seems to me to be fleeing from not solving a difficulty, and it is a case where flight is futile since there is no place whither we can flee for if time and space are given any sort of being they must still keep the contradictions of which idealists complain if they ever had them at all. Were it not the case that this book is already showing a tendency to acute inflation I should feel bound to discuss such arguments in detail but as it is I must sacrifice them for the sake of topics which seem of greater importance for my purpose.

I shall just mention two other general considerations in reply to such arguments. In the first place many philosophers who deny the reality of time (including Kant but not McTaggart) combine this denial with a general agnosticism as to

propositions about reality¹ and indeed if we must regard time as a mere appearance this is the most consistent course but yet they seem to have no hesitation in accepting one set of assertions about reality as opposed to appearances namely assertions about other particular human minds. They might say indeed that they did not *know* but only believed these propositions to be true but such a philosopher has usually maintained doctrines which exclude by implication not only all certain knowledge but all justified belief about reality as opposed to appearances² and therefore he ought logically to deny that he has any justification for believing that other human beings exist at all and assert only at the most that he himself experiences appearances which misleadingly or groundlessly suggest the existence of such beings³. Of course if these philosophers are satisfied with the position the objection will not touch them but I cannot believe that they would be satisfied if they once realised that they were logically committed to such a doctrine and I think that their satisfaction with their own view is due to their failure to see the conclusions to which it really leads them. To have knowledge of other minds is to know something about reality to hold a justifiable belief about other minds is to hold a justifiable belief about reality—not indeed reality as a whole but some element in reality and it follows that our knowledge or justified beliefs cannot as many philosophers have held be limited to appearances by the very nature of our minds. If it is retorted that we have no ground for asserting the existence of *minds* only of *experiences* other than our own this is not to escape metaphysical assumptions about reality since we are still asserting that reality is not inanimate but includes a plurality of different real experiences and we are therefore not limited either to our own ideas or to the mere study of appearances.

Secondly even supposing the alleged antinomies in the conceptions of space and time to be insoluble it would not necessarily follow that space and time were not real at all but only that their nature was somewhat different from what

¹ Except purely formal ones such as the principle that everything is self consistent

² This is not true of Kant without reservation but his reservations do not cover the case I have in mind namely the existence of other human beings

³ If he is justified on his premisses in asserting even as much as this which I should not be prepared to admit

it seems to be in unknown points relevant to the antinomies. The antinomies would then prove that we have a somewhat wrong idea of space and time but not that there is no such thing as space or time at all.¹

The view that time and everything in it is unreal in the sense under discussion sometimes claims the support of religious and mystical experience but surely at its best religion must not negate the rich world of phenomena which provides us with training and enjoyment but include it in its blessing. Surely to say that reality as viewed by the truly religious man must be a unity quite separate from and disconnected with everything concrete which we know and value is to reduce it to mere emptiness. Surely the unity will be more worthy of worship in proportion to the diversity within itself which it transcends and harmonises.

What has just been said about time applies equally to space *mutatis mutandis*. To many it seems easier to deny the reality of space than the reality of time because we ourselves seem to be in time in a sense in which we do not seem to be in space but we must not forget that many of our immediate objects of experience if not in physical space are at least spatial in character so that their reality would be affected by the denial. For while it is possible to maintain that we do not directly perceive independent physical objects it can hardly be maintained that we immediately experience nothing spatial at all. If physical objects are denied there still remain our sensa and images many or perhaps all of which are spatial as well as temporal. It is as inconceivable that there is nothing really spatial as that there is nothing really temporal for while a case can be made for the view that the spatial objects I immediately perceive do not exist apart from my experience of them I in any case still really see something spatial if only a fleeting sense datum. I should therefore dismiss outright all those arguments for idealism which rest on alleged contradictions in space and time and claim thereby to disprove the reality of space and time if this is understood in anything like its literal sense in which everything that exists is real. It must not be supposed however that to assert the reality of space and time is necessarily to deny idealism for the idealist may quite well hold

¹ Even if the possibility of immediate prevision of the future could be established this would not prove that succession was mere appearance but only at the most that the future has some kind of being

that they only exist as elements in our experience and yet that they are real

There are however other senses of unreal difficult indeed to define in which time and space may perhaps reasonably be said to be relatively unreal. But with these we are not concerned here. Certainly I do not imagine that any of the arguments which I have used for the reality of time would touch the contentions of philosophers such as Hegel, Bradley or Bosanquet when they say that time is appearance or that time is unreal. For them reality is a matter of degree and to deny the reality of anything is not to say that it does not exist at all but rather to make a low estimate of its significance in the universe. For the appearances do not fall outside the real but are subordinate elements in the real. The contradictions which these philosophers claim to discover in everything we know do not lead them to a total denial of the reality of the phenomena but to the supposition that all particular things must be dependent on some larger whole in which these contradictions are reconciled in an intelligible fashion. This view has its own difficulties especially in connection with the problem as to how the same thing can be at once self contradictory as it stands and self consistent from the point of view of the Absolute but it escapes the objection that it reduces space and time to mere illusion. And even though time is not an illusion it may still well be the case as Bosanquet puts it that it is more correct to say that time is in Reality than that Reality is in time or even perhaps in some sense that both in thought and in feeling to realise the unimportance of time is the gate of wisdom to quote the words of Mr Bertrand Russell. But such a view about time (or space) is not inconsistent with the view that physical objects exist in space and time though unperceived by any observer.

§ IV KANT'S ATTEMPT TO ESTABLISH EMPIRICAL REALISM WITHIN IDEALISM

We must now turn to Kant's attempts to safeguard the objectivity of the physical world without making it independent of our mind as does the realist. No idealist has been more anxious to achieve this end than Kant. He insists that his philosophy combines empirical realism with transcendental idealism. It is more difficult to see precisely in

what empirical realism was supposed to consist or at least what Kant conceived the essential difference to be between himself and a thoroughgoing idealist. We might say perhaps that the difference lay more in an attitude and a policy than in a philosophical dogma. It lay especially in Kant's insistence that we must not because physical objects are merely phenomenal despise what science has to tell us of them but treat this scientific knowledge as real and all important.¹ In this connection it is significant that he reduced to the level of appearance not only physical objects but even the self as known by us. He was thus able to say that physical science was in at least as good a position as any human knowledge and did not need to exalt psychology as knowledge of reality above the physical sciences as knowledge of appearances as he thought any other form of idealism must. If the physical world in so far as it affected our experience could be known if further it was as real as the self we knew in introspection and as much or more capable of being made an object of knowledge then it seemed to have quite as much reality as was needed by the scientist. But according to Kant not only was transcendental idealism compatible with science it was actually necessary to it. For his transcendental idealism seemed to him to constitute the only possible basis for a proof of the categories and a solution of the question how mathematics could give synthetic *a priori* knowledge and the whole of science would collapse without the categories and without mathematics. He points out repeatedly that he has not denied the reality of appearances provided we add to reality the words 'in experience',² and in the second edition at least of the *Critique of Pure Reason* he comes to regard the introspective consciousness of our mental states giving the appearance self or empirical self as posterior to consciousness of physical objects though the latter are also appearances.

¹ The empirical reality of time which Kant sought to maintain in the *Aesthetic* is defined as 'objective validity in respect of all objects which allow of ever being given to our senses' (B 52) and that of space is defined similarly (B 44) i.e. space and time are objectively real because they are of universal application within experience. We may note in this account two moments: space and time are called objective (a) because they are actually experienced (b) because of their universality. (The translations I use are taken from that by Professor Kemp Smith.)

² He in fact disparages the science of psychology severely putting it not on a level equal to but on one much lower than the physical sciences.

³ E.g. *Critique of Pure Reason* A 374-5 B 53-4 520

Now any form of idealism even if it has reduced all judgments to assertions about our experience has still to recognise the distinction between mere illusion and genuine perception between the merely subjective and the at least relatively objective between false and true judgments about physical objects unless indeed it is prepared to put the best-established conclusions of natural science on the same level as the wildest fancies of children and savages. It has reduced all judgments to assertions about our experience but this distinction must still be reinterpreted in terms of our experience. There must be some distinction between saying I experience A and saying A is present in a physical object even if physical objects be mere appearances. Kant's distinction is that in the case of genuine perception of physical objects my experience proceeds according to certain laws which determine inevitably that if I look I must have the experience in question. This constitutes Kant's proof of causality¹. We can only distinguish between objective and subjective sequence if we regard the former as consisting in an experience in which the order is determined by necessary laws. Thus if I watch a boat going down stream (objective succession) I must see it pass the different places on the river banks in a given order while if I look at a house (merely subjective succession) I may see either the ground floor or the roof first whichever I choose². The distinguishing mark of cognitive awareness of the objective in appearances (and we can have no such awareness outside appearances) is that the object perceived is determined independently of the individual act of perceiving. Objectivity means for Kant necessity and he claimed that it was his philosophy alone which secured this for his philosophy alone was really reconcilable with the possibility of synthetic judgments carrying with them necessity.

His method of distinguishing subjective and objective is liable to two criticisms. In the first place it may be pointed out that illusions or at least some of them are as much determined as any perceptions. If I look at a stick in water I am

¹ And reciprocity

² The fact that the order in which we perceive coexistent objects is in the proof of causality said to be reversible in opposition to the necessary order of objective succession does not mean that perception of the coexistent is not subject to laws since Kant proceeds in the third analogy to prove reciprocity of the coexistent by another application of the same method by which he had proved causality of the successive

just as much determined to see it bent as I am to see it straight when it is not in water and presumably even a man subject to hallucinations often cannot by any action in his power at the time prevent himself seeing e.g. snakes or pink rats

Secondly it may also be urged that our psychological states are causally determined as well as the physical objects perceived by us. Even if we are not determinists we must admit that causality plays an important if not a universal part in the self¹ but the mere presence of causality cannot be enough to distinguish the physical from the psychological unless the latter is not subject to causality

Kant provides no answer to these objections but he clearly holds the appearance self (or empirical self) to be completely determined by causality for his whole discussion of freedom proceeds on that assumption and we may guess how he might have answered them. Kant might have said that physical reality in the only sense in which it could belong to appearances entails necessity but that necessity need not entail physical reality. The conception of a physical object entails a system involving necessity but there are other systems by which we may order representations according to necessary laws and these need not be the same as that treated in physical science. Thus wherever we think of the appearance self we are ordering our representations in a psychological system in which they may occur in quite a different order and connection from that displayed in the physical system. This psychological system includes besides the same representations which go to make up physical objects also others such as emotions which are not regarded as part of the physical world at all but system it still is. Otherwise we could make no judgments about it. Similarly we could no doubt have systems of illusions explaining these by reference to perspective etc though the relation in which such systems stand to the physical world and to the appearance self remains obscure

The system which constitutes the physical world still possesses quite enough peculiar features to distinguish it from the object of psychology. Firstly it approximates more to being completely systematic and is much more amenable to scientific study. Secondly it is common to all human percipients i.e. all percipients with our form of sensibility and is therefore

¹ We are here talking about the self studied in psychology and revealed in introspection which Kant regards only as appearance and not as the real self

universal in a sense in which psychology is not. Thirdly according to Kant the appearance self is not subject to the categories of substance or reciprocity though he repeatedly states or implies that it is completely determined by causality. Fourthly the appearance self is not in space but only in time and therefore psychology is without the definiteness and clearness that can only be attained by demonstration in spatial form and further suffers seriously from our inability to apply mathematics to it. Fifthly though both the objects of psychology and physical objects are governed by causal laws the laws are different in the two cases.

It must be admitted however that Kant is inconsistent in his treatment of the appearance self¹ (he sometimes denies by implication that the categories can be applied to it at all and mostly applies one causality without applying the others²) and secondly that he does not realise the full seriousness of the problem of the distinction between genuine perceptions and illusions. After all most illusions are forced on us as much as genuine perceptions and are also common to all normal human observers under the same conditions. All men see a straight stick in water as bent and see objects smaller as they recede and they cannot avoid these experiences. Kant holds that the distinction between dreams and genuine perceptions must be made by means of empirical laws³ but we should like to have seen his views elaborated. One might think he meant that what was not determined by law did not belong to the physical world and what was determined did but this is obviously contrary to fact and incompatible with his application of causality to the appearance-self. The point of Kant's proof of causality is that objectivity entails causal necessity, but the circumstances affecting us which are subjective from the point of view of the physical scientist are studied as objective and therefore causally determined facts by the psychologist.

The physical world is then objective in the sense that it consists of elements in our experience which are necessarily determined irrespective of our individual peculiarities and in the sense that it is an object of science since it is governed by necessary and universal laws. Objectivity for Kant is closely

¹ V my book on *Kant's Treatment of Causality* ch. VI

² Kant refuses to admit psychology to the rank of a science (*Berlin edition* IV pp. 470-1)

³ V *Critique of Pure Reason* B 520-1

and essentially connected with necessity. This is quite compatible with physical objects in space having no existence apart from human experience. They are merely necessarily determined common elements in human experience. The conception of the physical world Kant admits to be essential if we are to systematise our experience at all but he does not admit that we need therefore regard the physical world as independent of ourselves. It remains for him just a necessary way of ordering our experience. Kant does not hold that we are first conscious of our own representations as subjective modifications of our mental state and then from them erroneously infer independent physical objects. He holds that we cannot think at all except by systematising our experience in terms of a world of objects and that introspective knowledge of representations is posterior not prior to this consciousness of objects. But for all that physical objects are not independent of our mind as are the things in themselves but only exist as combinations of actual and possible objects of experience.

There are a very few passages however in which Kant seems to go further than this. In the famous second edition refutation of idealism he declares in so many words that physical objects are not representations but things outside us. In the first analogy he declares all matter to be absolutely permanent an assertion which seems altogether incompatible with the view that it only exists in our fleeting experiences of it and in his posthumous work he definitely shows more signs of realism than he had ever done since the beginning of his critical period. But it remains a realism within idealism as is shown by the fact that it is just in his *Opus Postumum* the only work where he develops this realism with any approach to completeness that he goes further in ascribing characteristics of the physical world to acts of synthesis by the self than he does in any other book. Nowhere does he claim that scientific knowledge can refer to reality (things in themselves) or admit that physical objects may exist in space in a realist sense unperceived by us. Physical objects though realistically conceived, remain appearances.

How is this reconcilable with the passages mentioned especially the second edition refutation of idealism? In this remarkable passage Kant argues that consciousness even of my subjective representations presupposes something permanent and that perception of this permanent is only possible

through a *thing* outside me and not through the mere representation of a thing outside me ¹ The passage seems flatly to contradict Kant's repeated assertion that physical objects are only our representations and it has consequently been supposed by many commentators that he was referring here to the thing in itself and not to physical objects This interpretation seems to me quite impossible and it would assuredly never have been suggested if it had not been thought necessary to make the passage consistent with Kant's other views The principal objection to the interpretation is perhaps that Kant speaks of the things outside me as objects in space This spatial character is essential to the argument here and it is even more essential to Kant's philosophy that things in themselves should not be known to be in space There is no doctrine which Kant reiterates more repeatedly and firmly than this and nowhere else does it even seem to be contradicted by him Further in the introduction to the *Refutation of Idealism* itself he had just asserted that if space is regarded as a property of things in themselves space and everything to which it serves as condition is a non entity (*Unding*) It is hardly credible that Kant would have said this and then a few lines later calmly proceeded to ascribe space to things-in-themselves We cannot in this case invoke the theory of the multiple composition of the *Critique* since the whole *Refutation* was added in the second edition Other objections are as follows (a) Kant speaks of these objects as a permanent element in perception (*Wahrnehmung*) a phrase which would have been absurd as applied to things-in-themselves (b) They are introduced for the purpose of determining time-durations and seem to be presupposed as being themselves in time (c) The argument is essentially the same as one used to prove substance in the first Analogy yet Kant certainly intends there to prove substance only of phenomena (d) In the second note added to the proof Kant tries to confirm it by the facts that we always measure time by means of changes in the relations of physical objects and that there is nothing permanent given in experience except physical matter

¹ B 275 Kant says in his preface to the second edition (B xxxix n) that the sentence should be altered to the following This permanent cannot be an intuition in me For all grounds of determination of my existence which are to be met within me are representations and as representations themselves require a permanent distinct from them in relation to which their change and so my existence in the time wherein they change may be determined

So we must regard the refutation as an attempt of Kant a feeling his way towards a realism within idealism and we find that it can even be rendered consistent with most of the more subjectivist passages if we adopt Professor Vaihinger's solution that Kant is here speaking from the standpoint of the appearance self. Relatively to the appearance-self indeed physical objects simply cannot consistently be regarded as representations in our mind but only as things outside us. For it cannot be that the whole phenomenal world exists only in the appearance-self which is itself only a member of that world. But from the point of view of the real self they may still remain mere representations. Kant's realism so far from contradicting the view that physical objects are relatively to the real transcendental self representations is a logical deduction from that view when combined with the view that our phenomenal or appearance self also is only a set of representations. For if so the latter cannot itself be the cause of all our representations. If the appearance self is conceived as only a part of the phenomenal world to make all phenomena dependent on it would be like saying that a man had built the house in which he was born if it is rather conceived as consisting of the whole material of outer sense viewed in a different light it still more obviously presupposes and is not itself the constitutive condition of the physical phenomenal world. A realism relatively to the appearance self is inconsistent with Kant's general doctrine only if it be assumed that physical phenomena presuppose for their existence not a transcendental synthesis alone but also conscious introspection with the help of inner sense for the appearance self has no being at all except as an object of introspection.

So a Kantian idealist not only may but if he is to be consistent must regard the physical world both from the transcendental point of view as a set of mere representations made by us and from the empirical point of view as a set of independent objects. What the relation is between these two aspects of the physical world Kant does not specify but to do so would have been to go beyond the limits of knowledge laid down by himself for it would have been to claim knowledge of the relation between things in-themselves and appearances.¹

¹ Some commentators insist that appearances are just things in-themselves as they appear to us while Kant's phraseology seems to me more often to suggest that appearances are treated rather as different things from the latter but the controversy is easily solved

And he might have retorted that if no one can say what the relation is no one can say that it is self contradictory or impossible to maintain that the physical world can combine these two aspects can both be relatively independent and from the other point of view a mere appearance

Further it seems clear that any system of idealism which is to do justice to physical science must somehow combine within itself these two aspects including realism within idealism Kant's position is all the safer because he only stated the two aspects without committing himself to any definite views as to their connection The chief difficulty left is his statement here and in the First Analogy that matter is permanent which would naturally imply that physical objects actually exist even when not perceived a view that may seem definitely and completely inconsistent with the rest of his philosophy and indeed is so when interpreted in the ordinary realist sense but even this statement may be reconciled with his idealism if we suppose that what Kant thinks permanent is not anything actually perceived but certain conditions governing perception Indeed on Kant's view the statement that a physical object exists when we are not perceiving it is perfectly intelligible and true *provided only* it is interpreted as meaning that under certain conditions we should perceive it so that he would feel no difficulty in ascribing permanence to physical objects which were only actually perceived intermittently

§ V THE THING-IN-ITSELF

So far we have not dealt with the bugbear of most of Kant's immediate followers the thing in itself¹ I cannot find any justification for the view either that Kant eventually gave up his belief in the thing in itself or that he came to mean by it the Whole including appearances Certainly he does not

if we remember that according to his own principles Kant had no right to specify what the relation was between things in themselves and appearances Hence he was bound to leave it vague and could not commit himself either to the view that appearances were the identical things in themselves appearing or to the view that they were secondary entities separate from these

¹ Or better perhaps things in themselves though in strict consistency it is illegitimate to use either the singular or the plural since Kant cannot have intended to commit himself to the view that the unknowable was either one or many

regard appearances as partially known things in themselves. There is indeed an inconsistency here since if appearances are anything they must somehow fall within reality but it does not seem to have been an inconsistency that Kant realised as such.

Now the doctrine of things in themselves is the part of Kant's philosophy which has been subjected to the severest and most frequent criticism and it would be impossible to defend his *ipsissima verba*. But the doctrine in its general outlines seems to me much more defensible than is often supposed by critics. The chief complaint against Kant is that he has declared things in themselves to be absolutely unknowable and yet assumes some though a very limited knowledge of them. It is objected that to admit their existence is itself to claim of them some knowledge (or justified opinion which on his view would seem equally impossible). For it would be absurd to say that things in themselves exist unless we mean something by the term but if we mean anything at all by it to assert that they exist is to assert that they have the attributes included in the minimum meaning of the term. To say that we know X to exist is to say nothing at all if what we mean by X does not include some characteristic known by us and if it does we know something about X namely that it has the characteristic in question. It was argued by Kant's idealist successors that the conception of the thing in itself is the conception of a mere empty nothing and becomes the impossible the inconceivable a mere blank unknowable by us not because it is too much above our ken but because it is infinitely poorer in content than the conceptions which yield us fruit unknowable only because it contains nothing to know. And the inconsistency seems to be intensified by the fact that Kant in the interests of religion comes round to a view which admits under another name many of the philosophical conceptions that he had previously rejected and allows if not knowledge well grounded faith in the truth of some very important assertions about the nature of reality.

These objections however may be met by the distinction between determinate knowledge and indeterminate thought. Kant denies definite scientific knowledge of things in themselves but he admits that we can form a kind of vague and indefinite but still very useful conception of something not ourselves which affects us and on which appearances are grounded. And similarly it is not logically inconsistent on

the one hand to refuse to commit oneself to a clear cut metaphysical theory of God and on the other to hold as Kant did that our highest experience justifies us in coming to the conclusion that the least inadequate way of picturing to ourselves the nature of reality is to think of everything as controlled by an all wise all good all powerful mind while adding the proviso that in doing so we are not saying what it really is but only what it is in relation to us

A similar answer may be given to the common objection that Kant after having insisted that the categories can only be applied to phenomena proceeds inconsistently to apply them to things-in-themselves. If this is an inconsistency it is one which follows necessarily from the very conception of things-in-themselves for to admit that there are such things at all is to ascribe to them one category at least the category of reality (*Realität*) and moreover to think of the world we know as the appearance of unknown things in themselves is to base it on the latter as ground and so as cause. Ground is just the category of cause unschematised. If the things in themselves are not at least part cause¹ or ground of the phenomenal world it is meaningless to say that the latter is the appearance to us of the former so that even the very innocent looking assertion that we know the appearance only of reality not reality itself implies that two categories at least namely reality and causality are applicable to things in themselves. And Kant does expressly apply causality to the real world. He applies it to things in themselves in his doctrine of transcendental affection² to the self in his account of freedom and to God in his practical theology. Also we can hardly avoid thinking of the things in themselves as substances if we think of them at all.

The charge of inconsistency here is again met by Kant's distinction between knowing (*erkennen*) and thinking (*denken*)³. For his philosophical system does not debar him from thinking God or things-in-themselves or the transcendental self as having some relation to appearances which though non-temporal is otherwise like in kind to that which phenomenal

¹ It is not true that the relation of reality to appearance = the relation of cause to effect or ground to consequent. What I am contending is that it implies that relation at least whatever other relations it may also imply.

² I.e. he holds that things in themselves causally affect us thus producing sensations in us.

³ *Critique of Pure Reason* B xxvi-xxx 706-7 724-5

causes have to phenomenal effects. Kant's view is that we have no definite conception of the relation of reality to phenomena but that we cannot help thinking this reality and we cannot think it without using our categories though as applied to reality they are empty forms and so yield only the poorest and most inadequate of concepts. To put it colloquially while we cannot know reality or form any proper conception of it at all we can still think it in a sort of way and this though a very unsatisfactory result for anybody seeking scientific or theoretical satisfaction is yet sufficient for practical needs once we are convinced of the moral law and of the necessity that reality must be somehow ordered in conformity with this law. We have no clear conception of the relation between reality and appearances we cannot make it a matter of knowledge yet we cannot help thinking a reality which appears and we have no other way in which we could think it no other categories which we could employ. And in the case of the conceptions of God and freedom what positive content is required comes from ethics a branch of knowledge which is according to Kant unlike theoretical knowledge independent of experience.

For we must distinguish between the categories as unschematised and the categories as schematised. As unschematised the categories are mere logical forms and before they can be used in everyday life or science they must be schematised by the addition of time. Thus the pure category of causality is logical ground the schematised category succession in time according to a law. Now Kant does hold (a) that the categories as schematised could not be applied to reality which is indeed a truism from his point of view since reality is timeless and the schema always involves time (b) that the categories as unschematised yield no definite conceptions and nothing that could possibly be called knowledge, (c) that the categories could not be proved to hold of anything but phenomena. But these views are certainly not incompatible with maintain

¹ In the *Prolegomena* (§ 57 *ad fin*—58) Kant says that when he declares that we must look upon the world as if it were the work of a supreme understanding and will he means that the sensible world is related to the unknown in the same way as a clock a ship or a regiment is related respectively to its maker builder commander and describes this kind of knowledge as knowledge by analogy adding that analogy means for him a complete likeness of relations though the things related may be quite different (*sine vollkommene Ähnlichkeit zweier Verhältnisse zwischen ganz unähnlichen Dingen*)

ing that the categories as unschematised may be used in indeterminate thinking about reality though there is no theoretical proof of their validity and though the conception they give is purely formal

Kant indeed sometimes goes further and denies that the categories have any meaning (*Bedeutung*) at all apart from sensible conditions¹ and this if taken in the strict sense is incompatible with allowing even the limited application in question for how could the application of totally meaningless names be of any help to us whatever? We might as well call the relation abracadabra. But there is no need to press the literal sense of his language so far when it obviously makes nonsense of his philosophy. If we take him as signifying by meaning here clear definite meaning we have an interpretation which can well be reconciled with his general views. No doubt in his anxiety to avoid any dogmatism Kant sometimes expressed himself too strongly but his general position in this respect is plain especially when we consider that the *Critique of Pure Reason* was intended from the beginning to make the ground clear for a rational faith and when we take into account also his later works. The circumstances of the time explain adequately why Kant laid such great stress on the negative side of his philosophy for it was a time when even leading thinkers were apt to use the conception of God in order to provide a cheap solution for every intellectual difficulty and in general to treat it as if it were a scientific concept which could be made precise by *a priori* reasoning. What excesses must have been committed in this respect by lesser minds when even such great thinkers as Descartes and Leibniz misused theological conceptions as they did in their philosophies! If Kant had been writing in our own day when the main tendency is rather towards the opposite extreme of scepticism and subjectivism he might well have worded his philosophy somewhat differently.

It must be admitted however that there is a difficulty in combining Kant's theological views with his theoretical agnosticism but it does not lie in any logical inconsistency between denying knowledge of reality and admitting the notion of God as a regulative idea. It is perfectly possible logically that science and theoretical philosophy might give us no information about reality and yet that we might be justified in accepting a certain conception of reality as adequately

¹ E.g. *Critique of Pure Reason* B 308 707 724

established by a consideration of our ethical knowledge. But though possible logically it does not seem a very likely or plausible conclusion. what I should feel is rather that if we once adopt the line of the *Critique of Pure Reason* and insist that we are not justified even in forming opinions (let alone claiming knowledge) on theoretical grounds of anything but appearances if by its very nature our theoretical reason is for ever shut off from the cognition of the real if science cannot give us the slightest clue to any real characteristics of real things¹ if we can have no theoretical knowledge or justified opinion whatever of the nature even of our real selves if even introspection only gives the appearance of ourselves and never even a partial reality then this distrust of our intellectual powers must extend also to whatever ethical and religious conceptions we may have formed. If we hold that the rest of our experience gives us only appearance not reality why should we hold that our knowledge of the moral law (granted that it remains valid as a guide to action) tells us anything about what reality is? If we distrust ourselves altogether in the field of theoretical knowledge have we any more grounds for trusting an ethical faith which Kant does not claim to have justified by a proof in the strictest sense of the term? If our theoretical faculties which one would think were adapted to the discovery of the truth about reality if any part of our nature is fail us altogether in this matter and cannot be trusted at all is it not unreasonable to trust that those intellectual faculties whose function it is not to find truth but to regulate our practical activity will reveal to us the ultimate nature of the real? If on the other hand it is reasonable to have religious faith as Kant holds then surely it is reasonable also to hold that our theoretical and not only our ethical consciousness gives us some glimpse of the real world.

This line of criticism is important because it applies not only to Kant but to all the attempts that have been so often made to secure religion by denying truth to science and abandoning all faith in our reason. There are a few men to whom the truths of religion seem more certain than any other so that they could doubt everything else while still holding to God but they are rare indeed and in the absence of strict logical proof religion involves a trust that the human mind is in harmony with reality which in all consistency must if

¹ Kant somewhat modifies this position later especially in the *Critique of Judgment*

admitted at all be extended to the theoretical sphere. This does not mean that we need suppose science to give us knowledge in the strict sense outside mathematics but it does mean that if we have faith in the religious and ethical consciousness we should have faith that science at the very least can give us justified opinions containing partial truth about some characteristics of real things if only their relations. The religious man or the philosopher is so to speak cutting his own throat if he maintains the opinion popular in certain quarters now-a-days that science cannot give truth but only practical utility. Probably he usually means merely that science cannot give us the ultimate truth about the inner nature of reality which science does not claim to do or that the truths of science are less important to reality and are blended with a greater element of fiction than many scientists have thought in the past but expressed in its more extreme form the view calls for the immediate retort that if they are forbidden to believe the scientist most men are likely to find less ground still for believing the religious man and the philosopher.

But while as I have indicated earlier I see no adequate reason for agreeing that reality is totally and necessarily unknowable theoretically neither do I agree with the view of so many critics that the thing-in-itself is an inconceivable or groundless supposition. It is inevitable indeed that a thorough-going idealist should regard it as inconceivable if it is supposed to be independent of a knowing or experiencing mind but this objection need not be discussed here since it will only be valid if we have first succeeded in establishing idealism. Kant did not bring any arguments to show that everything must be dependent on such a mind but only to show that the objects of our knowledge and experience must be. Another reason why the thing-in-itself seemed inconceivable was because the conception was so empty and apparently so gratuitous. Kant gives no ground for believing in things-in-themselves but merely asserts their existence dogmatically.

Yet despite its difficulties the conception is of great importance and further it is essential for Kant's system. No doubt the primary reason why Kant believed in things-in-themselves was because it seemed evident to him that reality could not consist only of human minds and their representations. He had taken away from the real world all sensible qualities but he was still left with a real world as Locke after taking away colour and other sensible qualities was still left with the primary

qualities In fact the most likely explanation of Kant's neglect to provide a proof of the existence of things-in-themselves was that he felt the doctrine to be too obvious to need a proof Had Kant denied the thing in itself his system would have been totally transformed In the first place the physical objects we perceive would no longer be mere appearances since there would be no reality behind them of which they were appearances (Kant says in one passage that there must be things in themselves because an appearance implies some reality which appears ¹) In the second place he would have had to ascribe not only the form but the content of phenomena to mind there being nothing else left to which to ascribe it and this would have destroyed one of the most vital distinctions of his philosophy The doctrine of the synthesis as a putting together of given material would have had to be radically changed and what is more important still our knowledge would no longer be dependent on what is given us from outside and so would have lost its empirical character Thirdly Kant would have become what he called a dogmatic idealist for he would have had either to substitute an Absolute Mind for the thing in itself or to leave no reality save finite minds and their representations

The doctrine of things-in-themselves seems to have been based mainly on the fact that we are partly passive in perception The form in what we perceive is due to the transcendental self but what we perceive is not merely an empty form Besides form there is content and since he had no reason to think that this content was due either to our own or to any other mind Kant could not do anything but leave its source ² an unknown x He could not identify this source with God as Berkeley had done that would have been dogmatic idealism But he was as convinced as Berkeley or as any realist of its existence and was convinced also that it could not be in space or time and could not possess any of the ordinary perceptible qualities All he could do was to describe it as unknowable He did not thereby exclude the possibility that it might really be of the nature of mind or be in some sense

¹ This argument may seem merely a verbal quibble but probably what Kant meant was that the appearances presented to us are of such a character as intrinsically to point beyond themselves to a reality which appears

² He should in consistency have only asserted the thing in itself as a possibility on that ground since he had not proved the categories to be true of reality and therefore could not know that the content must have any source at all for a source is a cause

created and completely controlled by a divine mind on the contrary this was his own belief based on practical reason. All he said was that we must not *qua* theorists assert this though we may believe it *qua* moral agents. He does not even say expressly that the source of experience could not be wholly in human minds but only that since we do not know its nature we must not make any positive assertions about it. As a matter of fact however he was far too much impressed by our passivity in experience and by the presence of the given element in knowledge seriously to think of this as a possibility. Combination is *the only* element which is said to come from understanding¹ not from sensibility and sensibility is always regarded as consisting in the mere passive reception of impressions.

The doctrine of things-in themselves thus appeared to Kant not as an ungrounded superstition but as a reasonable form of agnosticism after limiting knowledge in the way in which he had done. Kant would have had no right to deny things-in themselves for that would have been to lay down a dogmatic theory of the universe as entirely constituted by selves and their representations. To omit this unknown x would have been more dogmatic than to assert it for this would have been to declare that the whole of reality was mental which he had not proved and could not on his own principles hope ever would be proved. It might more reasonably be objected however that Kant would have done better if he had admitted it only as a possibility a solution towards which he seems to incline sometimes but which he never definitely adopts. He does succeed in showing that we must think things-in themselves as a limiting conception but that we have to think something outside the world of experience ought not according to Kant's own philosophy to be regarded as a proof that this something exists and he has at any rate only succeeded in showing that we must think it as a possibility. To admit any limitation to our experience is to *think* things in themselves which are not completely revealed by our experience but it is not so easy to see how he could consistently with his other views prove their actual existence. It may be objected that even if it is not going beyond the world of experience to assert that it may not be everything it surely is going beyond it to assert definitely that it is not everything i.e. that there really is something else.

¹ *Critique of Pure Reason* B 129-30

Kant's answer to this criticism might be that in his doctrine of the antinomies he had shown that it was self contradictory to regard the phenomenal world as real because in that case we should have to regard it as either finite or infinite in space and time and it could be neither. And even if we do not hold him to have succeeded in showing this it may still be urged that we have certain standards as to reality to which the world of appearances does not conform though it is not self contradictory in the strict sense of formal logic. It is not coherent or intelligible it seems to carry incompleteness on the face of it it is lacking in real substantiality owing to the infinite regress it is never given as a whole it has no reason in itself for anything which happens within it since phenomenal causality is on Kant's view merely necessary succession and it gives no opportunity for freedom which is yet an indispensable postulate of ethics at least so Kant would add. None of Kant's ideas of reason are realised or realisable in it and therefore if it be real and all the real we are in the position of being inevitably by the very nature of our reason led to form conceptions which are as standards essential to success in science and yet quite false. It satisfies neither the intellectual nor the ethical nor the religious consciousness and as agents and knowers we are profoundly aware that we are more than appearances and must act as beings who altogether transcend the phenomenal world. All this may well be regarded as an adequate argument to show that the phenomenal world is not everything and once this conclusion is established we must either assert that reality consists entirely of minds or distinguish between the minds that we know to fall within it and the rest of reality which we can only describe as consisting of unknown things in-themselves since we have no right to imply that it is either physical or mental.

Only this argument is hardly reconcilable with the absolute unknowableness of reality for the condemnation by it of the phenomenal world as unreal implies that what is real must have a certain character¹ which the phenomenal world has not. If we say of A that it cannot be real because it has not the quality *b* we imply that we know or are justified in asserting that what is real has the quality *b*. In any case however the unknowableness of the thing-in-itself cannot be maintained in a strict sense because if we know even only how it appears to us or what experiences it helps to produce in us we know at

¹ If only the character of self-consistency

least some of its relational characteristics. And we might still reasonably maintain that our thought of the thing in itself was purely formal and empty of content. That all this was not considered by Kant incompatible with his view that the thing in itself was unknowable is shown by his application of the categories to the latter¹. He has also the valuable and suggestive doctrine of Ideas of Reason² to help him out. The term thing in itself is perhaps unfortunate as it suggests that a real thing must have a nature of its own which has no connection whatever with other things but this is an objection rather to the phraseology than to the substance of Kant's contention.

Kant's view of the real self is more difficult to defend against the charge of inconsistency. For firstly his admission that there is a real self at all is much harder to reconcile with his agnosticism than is the admission of the thing in itself since to say that there is a self is to say that there is something the generic character of which is known by us. Secondly as we have seen³ his doctrine of the synthesis makes the inconsistency worse for it implies considerable knowledge of the relation between the real self and appearances. Thirdly definite knowledge of this relation is claimed implicitly in the whole of Kant's epistemology even apart from the specific account of the synthesis since he throughout presupposes the knowledge that the self makes phenomena. Fourthly the assumption that he knows of the existence of other real selves besides himself is impossible to reconcile with his agnosticism about reality. If he can only know appearances he is involved in solipsism.

Further we have seen that Kant's view that time is unreal and that we do not perceive even our own real self in introspection involves great difficulties. And in general our knowledge cannot be limited to appearances to the exclusion of the real because if they are anything at all appearances are themselves part of the real.

§ VI KANT'S CHIEF CONTRIBUTIONS TO THE IDEALIST MOVEMENT

It may seem that I have done little but criticise Kant in this chapter and have shown no sign of appreciating his

¹ V above, p 103 ff

² V below p 114 ff

³ V above p 82

greatness but I shall now proceed to give a summary of those points where in my opinion he has made specially valuable contributions towards the development of a distinctively idealist philosophy and towards the solution of any of the problems which we are discussing

(1) Recognising the importance of the distinction between analytic and synthetic judgments and the impossibility of identifying the *a priori* and the analytic which had usually been confused he failed indeed to *explain* the possibility of synthetic judgments by his theory of intuition but developed a far more fruitful conception of the *a priori* than any which had gone before. He showed that *a priori* categories were involved in all judgment but that they could not be divorced from experience and he connected them with the fact that to think at all we must order and organise what is given in experience. Even if Kant's particular categories are in the form in which he stated and proved them not finally valid he proved that there must be some *a priori* categories in the only sense in which such a principle could be proved.

(2) Kant laid the foundations of the coherence theory of knowledge. For this theory is implicit in his doctrine that all knowledge or judgment involves systematisation though it was developed much further by his successors. As applied to the physical world and also to the appearance-self the doctrine if accepted carries with it a proof of universal causality.

(3) While establishing self-identity in the only sense in which it can be established by theoretical argument he showed that this identity was unthinkable apart from the unity of objects known. In this connection he developed the idealist doctrine that subject and object are inseparable correlatives without falling into a one-sided mentalism as have done e.g. the Italian Neo Idealists.

(4) While it may be hard to defend the doctrine of the synthesis as an account of the origin of the phenomenal world it at least emphasised the rôle played in cognition by an active mental combining and thus initiated an influence that has been of great importance in modern thought. We can trace it in an exaggerated form in Pragmatism and in Italian Neo Idealism but it also occurs e.g. in most modern non-behaviouristic psychologies of perception¹. The realist

¹ The general doctrine of mental construction in cognition is discussed above (ch II sect 2)

may deny hotly the proposition that the objects we know are constructed by a synthesis but he cannot deny the part that some kind of synthesis plays in the psychology of cognition and perception. Though it does not construct its objects it is at least necessary if we are to know them. The realist must admit that we can make no judgments about the merely given as such without any conceptual handling and any fitting together with the results of previous experience square this with realism how he may. All perception of physical objects involves a synthesis in the sense of recalling and holding before the mind a number of data successively and separately presented and then recognising that they form a whole of a certain kind ¹ and the same applies I think to all cognitions.

(5) Kant recognised clearly that if idealism is to stand it must be reconcilable with physical science and must therefore reinterpreted in terms of experience the distinction between illusion and genuine perception. He saw further that the minimum condition without which the reinterpretation can not be effected is the admission of causal laws physical objects being conceived as at least systems of experiences connected by causal laws.

(6) Though an idealist Kant put forward what are really two strong arguments in favour of realism. (i) that our experience can only be brought into even the minimum order necessary for judgment by the use of the conception of physical objects. (ii) that self-consciousness whether transcendental or empirical presupposes consciousness of objects.² For the transcendental unity of apperception can only be realised in unifying objects and empirical awareness of the appearance self (introspection) presupposes awareness of physical objects. But this is held by him rightly or wrongly only to justify a realism within idealism though the relative independence and objectivity of the physical world is strongly asserted.

(7) The double view of the self as knower and object known though generally rejected in the form in which Kant stated

¹ Price *Perception* p. 286

² I.e. for us physical objects though this does not rule out the bare possibility that some non-human selves or we ourselves after physical death might have to deal with objects of such a different kind that they could not be described as physical. We have no right to limit the possibilities as to what the object might be only to say that a self is to us inconceivable without objects.

it is in some form a necessary corollary of any idealism which neither treats knowing as merely one event among others nor agrees with Berkeley in confining the creative side of knowing to a transcendent God. From one point of view the self is to be treated as any object of science from another it is that for which in a sense all objects and all science exist. Granted the premisses we must on the one hand regard the self as a legitimate object of scientific study and must examine it frankly and fearlessly not hesitating to explain by causal laws everything that can be so explained but on the other hand we must recognise that there is another aspect of the self namely its aspect as knower and agent and that this aspect in a sense transcends the physical world and the temporal process altogether since otherwise the self could not know what occurs at different times and places. In this way idealism at once left psychology free to advance unencumbered by metaphysical presuppositions and also safeguarded against naturalism what it held to be the spiritual interests of man. This does not prove its truth but it was based on arguments which though they win far less ready assent to day certainly cannot be dismissed lightly or adequately regarded as merely superficial fallacies due to a confusion between knowing and object known and though it need not be accepted it must not be despised by a realist till he has worked out a more adequate and more coherent philosophy of mind than his opponents. But as far as Kant is concerned those who condemn such views as too dogmatic should remember that he protested in the strongest terms against any definite assertion as to the ultimate nature of the self or the spiritual character of reality. The knowing self to Kant can only be known in its effects i.e. knowledge not in its intrinsic nature.

(8) The conception of regulative principles (Ideas of Reason) is of the greatest value as helping us more than any other logical distinction yet made can to tread the precarious middle path between dogmatism and scepticism. Kant saw that science presupposes certain standards but he did not assert these to be established facts about reality or even about appearances except in so far as they were the minimum condition without which we could have no knowledge at all (in which case he called them categories or concepts of understanding as opposed to ideas of reason). Neither did he dismiss them as ungrounded he recognised their value as ideals

which might be progressively realised and at the worst can serve as a stimulus and guide for research. We must not say that the world is ultimately a thorough going system but we can hope that it will prove progressively more and more to be so and we can act on the assumption that our knowledge can always be made more of a system than it is already provided we let this serve as an encouragement for detailed research and not as a substitute or sedative. We have ideas rooted in our mind of intelligibility system and unity which go further than anything that can be presented in our experience and these give us a not irrational hope that they may be fulfilled in some fashion if not in the world of experience at any rate in a reality behind experience. We cannot prove them or turn them into definite concepts we must not treat them as metaphysical or scientific dogmas but they have been of supreme value to science by providing it with an ideal and a policy.

Somewhat different is Kant's treatment of those ideas of reason which he regarded as essential for religion or for a philosophical ethics. These—God freedom and immortality—Kant means not merely to hold out as hopes but definitely to assert as realities. He does not like the *Als Ob* school hold merely that we must act as if there were a God though there may be no God nor does he mean that propositions about God are valid only as expressing our practical or our emotional attitude towards reality and not as asserting objective facts. It is on the contrary quite certain that Kant believed in God freedom and immortality. The idea of God is for him regulative as opposed to constitutive only because it is not logically or scientifically provable and is not a definite clearly intelligible concept capable of being employed in a way that will give it concrete empirical content¹ but it is still for him an object of justifiable subjectively certain belief. Kant's protest was mainly against the attempt to employ it in order to remove scientific and metaphysical difficulties and against the assumption that it had the same kind of logical status as a scientific concept which must be precise clear cut and usable in dealing with empirical data and the same applies to freedom and immortality. His account of the right philosophical attitude towards the fundamental concepts of religion is masterly and holds the balance admirably between the sceptic and the unreasonable dogmatist.

¹ What content it has is supplied by ethics

Historically its effects have been very great, but few who have been influenced by it have succeeded so well in hitting the middle path, for his doctrine is liable to grave abuses both by those who make use of his theoretical agnosticism to bolster up irrational and unfounded views and those who reduce religious beliefs to mere fictions and yet think they can preserve their value for life and practice

CHAPTER IV

THE THEORY OF INTERNAL RELATIONS

§ I AN ANALYSIS OF INTERNAL AND EXTERNAL ¹

THE doctrine that all relations ² are internal is commonly held to entail two very important consequences. In the first place the doctrine is usually thought both by advocates and opponents to lead to some form of epistemological idealism. For if all relations are internal the relation between cognition and its object will share this character and it would seem to many to follow that the object cognised is made or changed by our cognition of it. The fallacy involved in this argument I have pointed out elsewhere ³ though no doubt the internal relations view in some of its interpretations would entail a much closer unity between the two than would be admitted by a realist.

There is however another very important consequence

¹ My conclusions from the long and complicated argument of this section are given on pp. 136-7.

² It may be asked whether I regard relations as holding between substances or between qualities or states of substances. The answer is—sometimes one way sometimes the other. Substances are related to each other and so are qualities and states of different substances or of the same substance. Further any relation between states or qualities of two substances entails a relation between the substances i.e. the relation of having states or qualities related in this way. This explains why e.g. causality and similarity are treated sometimes as relations between things and sometimes as relations between qualities or states of things. We say alike—this coat is similar to that (in some unspecified qualities) and the colour of the two coats is similar or the two coats are in a similar state of disrepair and again we speak sometimes of things and sometimes of events or qualities as the cause of a given effect in a thing. A causes B implies A has states or qualities connected with B by the relation of causality but to have states or qualities related in this way itself constitutes a real relation between A and B. A is similar to B is equivalent to A has some characteristic similar to or identical with a characteristic of B.

³ Ch. II sect. 4

which I think really would follow from the doctrine in question in the sense in which that doctrine is usually held and would involve a totally different view of reality from any that could be established on another view of relations. For if it is true that all relations are internal in the sense usually given to the term by those who maintain the so called theory of internal relations it would seem to follow and I think really would follow that reality is a unity of a type something like that postulated by the coherence theory and we are near to Bradley's conclusion that we could know no one thing fully without knowing everything else also.

But this is talking vaguely as usual in controversy the terms round which the dispute centres are used in several different senses and it is necessary to distinguish these before we can proceed with the discussion. I wish myself—and I am quite certain any readers will before long wish far more strongly still—that we could have been spared this labour but there is no doubt that the expression internal relations has in the course of the controversy been used in each of the different senses to be distinguished here and I think that the idealist theory of relations has gone astray through failing to make the distinctions in question. I am most painfully aware that this section will in consequence be very complicated but for this a large share at least of the blame must be borne by those who have used the words so ambiguously.

Now etymologically internal relations should mean relations between elements within a given whole and external relations should mean relations between that whole (or elements in that whole) and something outside the whole (By outside I mean not spatially outside but other than and not included in whether partially or wholly). But this is clearly not what is meant by the distinction in the form in which it has become a subject of controversy though some writers on the subject may have been influenced by this sense of the words. To maintain in this sense that all relations are internal would obviously be sheer nonsense unless the whole in question was everything that is in which case it would be a tautology. No doubt particular relations may be described as internal or external in this sense relatively to a particular whole but we can leave the sense aside for our purpose. We shall find quite enough different meanings of the terms which have been the centre of controversy.

without introducing a single one beyond what is absolutely necessary

In the first place it is sometimes said that all relations are internal in the sense that they all fall within the nature of the related terms. This definition while etymologically more justifiable than most involves many ambiguities and confusions. If we mean by the nature of a thing its full nature and do not include only its essential characteristics this may be interpreted as including everything which is predicable of it and so all its relational characteristics without exception however unimportant they may seem.¹ We may then say that any relation falls within the nature of both or all the terms that it relates if by this is meant simply that whenever r relates A to B A has the characteristic of standing in the relation r to B and B has the characteristic of standing in the converse relation to A but this will not carry us very far. It is an important fact about relations that no instance of a relation can occur as a self subsistent entity but only in conjunction with terms which possess the characteristic of standing in that relation but if by nature be meant essential nature it does not follow at least without further argument that relations fall within the nature of either or both² related terms. Further it is not strictly speaking the relation which falls within their nature even in the extended sense of nature but the characteristic of standing in the relation. It is not true that 'between' or 'alongside of' is predicable of me but only the relational characteristic of being between the table and the door or alongside of the table.

And if the use of the terms nature and relation is misleading and ambiguous so is the use of the spatial metaphor of within and without. Spatial metaphors may indeed sometimes provide the least inconvenient way of refer-

¹ Mr Bertrand Russell exaggeratedly says 'The whole point of view (of the Hegelians) turns upon the notion of the nature of the thing which seems (i.e. according to the latter) to mean all the truths about the thing' (*Problems of Philosophy* p 224). Dr McTaggart uses nature to mean all the qualities of a thing (*The Nature of Existence* vol I p 64) including the qualities of standing in the various relations in which it stands (id p 116). The latter are what I have called relational characteristics.

² For the sake of convenience I have sometimes spoken as if all relations were dyadic but my statements could easily be expanded so as to cover relations with more than two terms. Nor do I necessarily rule out the possibility of a term standing in some relation to itself.

ring to non spatial facts but the present one is disqualified for this purpose by two serious faults. In the first place it suggests that a relation stands to each of its terms as part to whole which is certainly not the case. A relation could not connect its terms could not do its work of relating if it were not something more than part of either or severally of all its terms. If the difficulty is met by saying that it is not the relation but the characteristic of standing in the relation which falls within the nature of each term we have still committed the error of confusing a characteristic¹ and a part. When we say that A stands in the relation r to B we do not mean that standing in the relation r to B is part of A. A characteristic of X is predicable of X but of a whole we cannot predicate its parts only the characteristic of having these parts.

Further while X cannot be within A in the spatial sense without being wholly within and cannot be both within and without A the fact that a relation falls within A in the sense given does not imply that its whole nature is included in A. This description ignores the external reference which is the most essential feature of a relation and this being so it is not even clear that in the sense in question a relation cannot be both internal and external. Even if we are speaking not of relations but of relational characteristics it seems obvious that the whole nature of a relational characteristic is not exhausted when we have described it as characterising the term to which it belongs. For its reference to another term is also essential to it otherwise it would not be a *relational* characteristic at all. Nor is any metaphor necessary here. To say that a relation falls within the nature of a thing is only true if it means no more than that the thing stands in that relation to something and if this is all that is meant it is better to say so.²

¹ I call a characteristic of X whatever can be predicated of X thus including under this heading both non relational qualities and the property of standing in any specific relation i.e. all relational properties. Both classes of characteristics are in an important sense attributes of the term and so in a sense qualify it but it is perhaps best to avoid the words attribute and property in this connection because of their logical and metaphysical associations and to confine quality to non relational characteristics (I am not using characterise in Mr Johnson's sense in which it is opposed to inherence).

² Under this heading comes Bradley's definition of internally related as meaning that the element itself and not merely something else is qualified by the relation (*Logic* I p 127 note 14 added).

The second meaning of internal relation is a relation essential to its terms. This sense can easily be derived from the first if we interpret the nature of a thing more strictly so as to exclude all characteristics which seem superficial. The theory of internal relations is consequently often criticised on the ground that so far from all relations being essential to their terms some relations in which a thing stands are quite unimportant to it ¹. One of the causes which have hindered the acceptance of the theory as usually understood and of the allied coherence theory has been the erroneous supposition that an advocate of such views was bound to maintain that all relations are essential to their terms a proposition which when applied to the relation between any particular human being and a meteor fifty million miles away or a mammoth in the Ice Ages seemed utterly absurd. Even if everything is related to everything else all science depends on making a distinction between the relations which are important ² and significant and those which

in 2nd edition) That a relation must (at least to some extent) qualify its terms is used by him as an argument against external relations but he does not show how it follows from this that a relation cannot be external in the other senses of the term for this is clearly not all that he means by external. E.g. he gives also the quite different definition of external as making no difference to its terms. Nor is the word qualify at all appropriate. For (a) it ignores the distinction between qualities which alone qualify and relations and suggests quite inconsistently with Bradley's real intentions that he means to reduce all relations to qualities and (b) it confuses a relation with the characteristic of standing in that relation. Professor Joachim also asserts as an essential part of the doctrine of internal relations that a relation qualifies its terms (*The Nature of Truth* p. 11).

¹ It has been objected to my treatment that important is not the natural meaning of essential. It is clear however that one sense of essential has reference to the distinction between essence and accident and since both on my own view and on that of the idealist philosophers whose doctrine of relations I am discussing this distinction can in the case of concrete objects only be regarded as one either of degree or of convention it resolves itself into the distinction between the more and the less important. Further even if essential is not the same as important it is clear that to show that a relation makes no appreciable difference to a thing is to show that it does not belong to the essence of the thing in the sense in which essence is contrasted with accident. Even if what is important is not necessarily essential in this sense certainly what is unimportant cannot be. Another sense in which relations may be held to be essential to their terms I shall discuss later.

² Usually this means causally important. We call something important usually either because it produces effects which are very

are quite unimportant and superficial and since most relations of a thing could be altered without changing the thing much it seems that most relations of a thing fall into the latter class. It seems clear also that this is often so with the relation between cognition and its object. In the case of most of the things I know it is a very unimportant fact for the thing known that it happens to be known by me and sometimes at least it is a very unimportant fact for me that I happen to know it. This is true but to dismiss the arguments of any considerable idealist philosopher about relations simply on these grounds is unfair. We cannot say that the idealists denied that some relations are unimportant to their terms but at the most that they did not sufficiently emphasise this fact in their exposition. This was partly because it is impossible to draw a hard and fast line between relations which are important and relations which are unimportant. But the same applies to most distinctions. It holds of the qualities of a thing for instance as well as of its relations. But while the coherence theory asserts that every thing is relevant to everything else it does not deny the different degrees of relevance without which science would be impossible. However the term *essential* may be used without reference to the distinction between essence and accident and may imply not that the relation is very important in the ordinary sense but only that the terms related could not be the same if the relation were absent and this is undoubtedly involved in the internal relations view as usually held but it is better to express this interpretation of the view more clearly under a later heading.

Thirdly some forms of the internal relations view commit the definite error of implicitly reducing relations to qualities. This is involved in the logical doctrine that all propositions are of the subject predicate form and in the theory that numerous and extensive in range or because it produces effects to which we attribute great value positive or negative. It is impossible precisely to define the distinction between important and unimportant any more than the distinction between great and small but differences in degree of importance are still real as are differences in degree of size. Again (and here the parallel with size breaks down) what is more important in one respect e.g. economically may be less important in another e.g. culturally but that does not prevent the one being really more and the other really less important in each respect. At any rate if some relations are not objectively more important than others in respect at least of the difference they make to a given process there is an end of physical science or reasonable practical action.

the subject includes all its predicates analytically from which Leibniz deduced the non interaction of the monads. It is all too easy to interpret the phrase within the nature of in a sense which will have this effect and to be misled by the fact that a proposition asserting a relation can be put in the verbal form A is related to B by relation r or A has the quality of being related to B by relation r into treating relations as if they were really simply qualities. Such a view carelessly obliterates or ignores one of the most fundamental distinctions of philosophy and at once leads to a vicious infinite regress for we need other relations to relate the qualities and these relations being still really qualities need others *ad infinitum*. If relations are reduced to qualities they will not do their distinctive work of relating. Mr Bertrand Russell said in 1924 that he meant by the doctrine of external relations

primarily this that a relational proposition is not in general logically equivalent formally to one or more subject predicate propositions. Stated more precisely Given a relational propositional function $x R y$ it is not in general the case that we can find predicates $\alpha \beta \gamma$ such that for all values of x and y $x R y$ is equivalent to $\alpha x \beta y \gamma (x y)$ (where $(x y)$ stands for the whole consisting of x and y) or to any one or two of these. This and this only is what I mean to affirm when I assert the doctrine of external relations and this clearly is at least part of what Mr Bradley denies when he asserts the doctrine of internal relations.¹

I am inclined to agree with the doctrine of external relations thus interpreted but do not think that this is what is usually meant by it. In particular I must dissent from Mr Russell's interpretation of Bradley who so far from reducing relations to qualities makes it an essential part of his argument for the merely phenomenal character of all the objects of our thought that they cannot be thus reduced and that qualities are nothing without relations.² It is true that Bradley regards relations as unreal but he puts qualities in the same position.³ Likewise Bosanquet says in so many words that relations cannot be reduced to qualities nor qualities to relations.⁴ Leibniz who did commit the error

¹ I assume that $\alpha \beta \gamma$ stand for any *non-relational* characteristics

² *Contemporary British Philosophy First Series* p 371 ff

³ *Appearance and Reality* p 26 ff

⁴ *V Appearance and Reality* pp 20-1

⁵ *Logic* 2nd ed. p 279

in question was not a member of the school of philosophers usually associated with the theory of internal relations. But in any case we shall do well to dismiss as quite untenable the view that all relations are internal in the third sense as in the second sense of the term while voicing a strong doubt whether it is fair to accuse leading idealists of having held that all relations are internal in either of these senses.

Fourthly the internal view of relations may be taken as simply asserting the fact that relations involve some kind of genuine unity between their terms. As Professor Laird says ¹

Ultimately the question is whether a relation between things can describe a genuine connection or unity between the things. If it can there is no mystery for the fact *ex hypothesi* is intelligible. If it cannot such relations do not relate and are unintelligible if they pretend to do what they cannot do.

Many idealist philosophers have however shown the tendency to leap at once from this mere assertion of some unity to the view that everything is bound up in a unity of a particularly close and intimate nature with everything else. But because there is some connection between two related things we must not therefore jump to the conclusion that they are as much a unity as are different states or ideas of the same mind or different qualities of the same thing. A fallacy of this type seems to me to form part of the basis of Spinoza's monism. He assumes that because if we define substance as something absolutely independent there cannot be more than one substance in the world therefore every particular thing is a mode of the same substance in a sense which gives it a merely adjectival being. But it does not follow because things are related e.g. causally that therefore they are related as closely as are different characteristics of the same substance. He and his followers have not shown that there is no middle term between no relation at all and such a close relation as that nor refuted the common sense view that there is a distinction between the relation which holds between different things and that which holds between different qualities of the same thing so that the world may consist of a number of different things which are causally related but have not the intimate relation that constitutes one substance in the more usual sense of the term. Because things are causally related to each other and therefore are not separate

¹ *Knowledge, Belief and Opinion* p. 214

substances in the sense of being absolutely independent it does not necessarily follow that they are mere qualities it does not necessarily follow as many Hegelians have held that because human minds depend on each other in many ways they all constitute one single Mind¹ When we have said that a relation entails the unity of the related terms we have said very little for if we are asked what the degree and nature of that unity is we can only answer that it is just the kind of unity which consists in being united by that specific relation When we have given the relation we have already defined the unity which it involves This may be very slight as when the relation is mere coexistence at the same time or very close as when it is compresence as a part of the same state of consciousness To speak of the unity involved in all relation is of little value except as a warning against the more extreme pluralists who sometimes talk as if there were hardly any connection or unity in the universe at all but since everything in the physical universe is related in some way (if only by the relation of spatial distance) to everything else relation is compatible with a high degree of separateness unless some specific proof can be given to show that the world is really much more of a unity than it appears to be

Professor Laird also criticises strongly a certain interpretation of the internal relations view which we may take as our fifth sense

It is possible to assert with some confidence he says that if A has some relation r to B it is not only logically conceivable that A and B retain their characters unmodified in the relation but it is logically inconceivable that they should not do so Relations hold *between* terms and form or express a tie *between those very terms* Thus in the propositions 3 is greater than 2 and 3 is greater than 1 one and the same 3 occurs in both propositions not a 3 modified by its relation to 2 in the first instance and a different 3 modified by its relation to 1 in the second instance Either the whole relational way of regarding things is mythopoetic or this identity of terms must be preserved²

Clearly he is right in holding that no tolerable view of relations can be incompatible with the fact that the same term may stand in different relations and he is also as I

¹ Cf also Lotze's argument from causal connection to monism

² *Knowledge Belief and Opinion* pp 78-9 cf also Cook Wilson *Statement and Inference* vol I p 71 ff

contend elsewhere¹ right in holding that it cannot be true that all relations alter or modify their terms if by this is meant that they cause a change in their terms. If A and B are to stand in a relation at all they must first have a certain character of their own and this character is not made by the relation in question. Relations we may say then are all external in the sense that any relation presupposes a certain character in the terms related which is itself not due to and not modified or constituted by the relation in question. But for all that it might still well be the case that the relation was internal in the different senses discussed later that its character followed from the character of the terms and that the terms could not be the same if the relation were different. The nature of the number five is not modified or constituted by the fact that it is the cube root of 125 for the points made by Professor Laird clearly apply in this case yet that they stand in the relation in question follows from the nature of the terms and five could not be what it is without being the cube root of 125. Professor Laird seems to me therefore wrong in concluding from the argument I have quoted taken alone (and he cites no other argument) that

It follows that in so far as some known object O stands in the relation of being known to an ego E it cannot be logically inferred that O is therefore different from what it would be if it were quite alone or from what it would be if related to something that is not an ego at all.²

I think the proposition is true but to maintain that it follows from the argument given involves a confusion between two senses of internal relation.

Sixthly Bosanquet defines internal relations as relations grounded in the nature of the related terms.³ By this must presumably be meant that their presence depends⁴ on and is determined *either causally or logically* by characteristics of their terms. This is undoubtedly true of some relations e.g. the mathematical relations, also similarity and difference. That

¹ Ch II sect 4

² Id p 79

³ *Logic* p 277 ff 2nd ed. cf Taylor *Elements of Metaphysics* p 141

⁴ A may be said to depend on B wholly when A could not occur without B and follows necessarily from B alone and to depend on B partly when the presence of B is a necessary though not a sufficient condition of the presence of A.

7 is half of 14 or that something blue differs in colour from something red can undoubtedly be deduced from the intrinsic nature of the terms. But on the other hand the relation of physical contiguity between Professor Stout's *Manual* and Professor Ward's *Psychological Principles* in my bookshelf obviously does not follow from the nature of the books thus related since an external agent myself placed them together and might equally well have put other books side by side instead. But even here we cannot say that the intrinsic nature of the books had nothing to do with the relation. They certainly would not have been put together on my bookshelf if they had not both been books and if we may include in their intrinsic nature not only their physical form but also their subject matter the fact that they are both psychology books is not irrelevant for I make a habit of putting on the same shelves books dealing with similar subjects¹. The occurrence of this relation is therefore partly due to their intrinsic nature but not *wholly* due to this both because my intervention as an external agent was required and because the general rule I have mentioned does not fix which particular psychology books I put side by side so that the *Manual* might as far as this is concerned have equally well been neighbour to any of the other books on the subject I possess. This illustration shows how even a relation of a very arbitrary kind may be and commonly is due partly to the nature of the related terms. Mere juxtaposition and distance in space are usually taken as the best examples of purely external relations yet even these depend partly on the character of the objects related. For whatever is thus related must at least be spatial itself and have an intrinsic nature compatible with that and again it must be intrinsic.

¹ Here what dependence and determination there is is causal not logical (though it is never a relation but only its occurrence at a given time and place which can be said to be caused) but the idealists to whom we are referring are thinking of relations as grounded in a very wide sense which covers both causal and logical grounding. Different as logical and causal necessity may be it does seem clear that they have something in common which may be expressed by the words follow from depend determine and that it is an important fact about relations that they are grounded in their terms in this sense. In all cases the nature of the terms is *relevant* to the relations in which they stand to each other. Anyhow the view we are discussing cannot be stated unless we are allowed to use dependence and determination in this wider sense. The relation between causal and logical necessity will be considered later.

cally of such a nature that it reacts upon the causes which have operated on it in such a way as to lead to or at least be compatible with its occupying the position it now does. For instance the articles I mentioned above would not have occupied the position they now do if they had been too heavy for me to lift them or liquid or for any reason incapable of standing on a bookshelf. We can indeed go to the length of saying that in all cases where terms stand in a relation this circumstance is partly dependent on and due to the nature of the terms in question. The only alternative would be to hold either that the presence of some relations is altogether independent of anything else in the universe including their own terms¹ or that in some cases a third term C could produce a relation between A and B absolutely irrespective of the nature of A and B which is impossible since the nature of A and B must at any rate be such as to be amenable to C's causal influence. For a relation to occur at all a necessary though not always a sufficient condition of its occurrence must be found in the nature of its terms. The qualities of a term are *relevant* to the relations in which it can stand.

In the first place a relation if it is to be a relation at all must unite some terms. Secondly most if not all kinds of relation presuppose a specific common character usually or always of the type called by Mr. Johnson a determinable in the related terms without which the assertion of the specific relation would be not merely false but absurd in the way in which the questions—*is virtue yellow?* or *is the British Constitution a triangle?*—are absurd to anybody who knows in the barest outline what the words mean. Spatial relations presuppose in this way the common determinable of extension arithmetical relations the common determinable of number the relation of similarity presupposes some common determinable in the determinate value of which the objects are said to be similar the relations of enmity or love the common determinable of emotional capacity the relation of causality² the common character of being events or con-

¹ Bradley argues that if they were external, relations would have to be thinkable apart from any terms at all (*Essays on Truth and Reality* pp 238-291).

² As commonly understood. There may be other senses of causality in which it may connect terms one or more of which are not events or continuants in time but that relation if it occurs is a different relation from the causality known to us though analogous.

tinuants in time and perhaps membership in some specific causal system

Further not only do most or all relations presuppose a common determinable but also the number and kind of relations into which anything can enter under given circumstances are at least very much limited by the determinate values of the determinables which qualify it at the time I cannot indeed whenever A stands in a given spatial relation to B say that it could not have stood in that relation if its shape or weight had been different (e.g. if Ward's *Principles of Psychology* had been an ounce heavier than it is that presumably would have made no difference to its place on my bookshelf next to Stout's *Manual*) but I can say that its shape and weight as causal conditions are most important factors in determining the spatial relations into which a thing enters. For a book to stand in my bookshelf at all its weight and size must fall within certain relatively narrow limits and in the natural world apart from human control the positions and so the spatial relations of things seem to be determined causally mainly by the determinate values of a few determinables (primary qualities) which characterise the things related. Only while we may say of a relation that its presence logically presupposes a certain determinable we cannot say that it logically presupposes but only that it is causally determined partly by the determinate value of that determinable. This is an important distinction often slurred over too readily by idealists.

In the case of the cognitive relation it is difficult to find a determinable common to both terms which is logically presupposed by the relation but it is still quite clear that the determinate characteristics of the terms play a large part in causally determining whether and when a given mind enters into that relation with something. Which facts I come to know is a circumstance that depends partly on the specific nature of the facts partly on my interests and my capacity and so on my psychology. It is also clear that the cognitive relation always logically presupposes in *one* of its terms certain determinables, namely those which are involved in being a mind.

But if we use *determine* in a wide sense to cover both logical and causal determination we may say that the occur-

to it. A theologian would not regard God as cause of the world in quite the same sense as one phenomenal event is regarded as cause of another.

rence of a relation is always at least partly determined by the intrinsic nature of its terms though it is as I have said important to note that we can only maintain this if we include under determining both the case where B is a *a priori* deducible from A and the case where A is part cause of B. With the same qualification we may say that it partly depends on qualities in its terms in the sense of partly depend which was defined above¹ where I said that A might be described as depending partly on B when the presence of B is a necessary though not a sufficient condition of the presence of A. In this sense it is obvious that any relation depends on qualities in its terms. It could not be present at all if its terms were not characterised by a certain determinable and if their determinate qualities within this and other subordinate determinables did not fall within certain limits and in cases where the entry of two terms into a relation is causally conditioned some qualities of the terms always form a necessary part of its causal conditions. For A and B cannot be causally determined to enter into the relation unless the nature of A and B is such that the external causes which determine them produce just these effects and none of the infinite number of other alternative effects which are logically conceivable. So far from relations being independent of their terms the qualities of their terms are most relevant to the occurrence of the relations.

Seventhly an internal relation is often described as a relation which makes a difference to its terms². It might be thought that make a difference meant cause a change in but it is perfectly obvious that everything cannot be related in this way. I suppose however that what is meant is not that the relation *causes* a difference but that the terms would necessarily have been different from what they are if they had not been thus related. This formula cannot be

¹ p 126 n 3

² E.g. Professor Taylor (*Elements of Metaphysics* p 147) defines external relations as relations which make no difference in the qualities they relate. On p 141 he defines them as relations which are independent of the special qualities of their terms as though the two meanings were convertible. Bosanquet (*Logic* 2nd ed p 277) says that what he is concerned to maintain in the doctrine of internal relations is that relations are so connected with the properties of their terms that any alteration of relations involves an alteration of properties and *vice versa* but he adds that he prefers the expression relevant relations to internal relations. It might have saved a good deal of confusion if all the advocates of internal relations had done so.

applied to relations between abstract universals e.g. the relation of equality between the pure number 4 and $2 + 2$ because we cannot speak of the possibility of an abstract universal being different from what it is but only to relations between concrete terms¹ but since I only discuss the latter class of relations I need not try to reword the definition so as to cover relations between universals also

So the assertion that all relations are internal in this sense means that where two² terms are related in some specific way it is always true that they could³ not both⁴ have been what they are⁵ without the relation being present⁶. This is true e.g. of most or all quantitative relations and of the relation of similarity or difference. If P is half the size of Q or greater than Q or similar to Q in a given quality it follows that if the relation had not been present the terms P and Q could not both have been what they in fact are.

It is worth noting however that in all cases of relations between concrete terms *one* of the terms could have been the same without the relation being present (or to cover the case of multiple relations let us say all but one of the terms related). If P is two and Q four cubic inches in size P must bear the relation half the size of to Q but it does not follow that P would still stand in that relation to Q if Q were different in size. There are indeed thinkers who claim to have shown that no one fact in the universe could have been different from what it is without everything else being different but until and unless this is proved we must not assume it in our definitions. If it be established later we can draw the conclusion then. At present let us call a relation internal in this sense if it is such that *both* of the terms could not have been what they are without the relation holding between them.

¹ I have to thank Professor G. E. Moore for pointing out this limitation in the definition proposed by himself in *Philosophical Studies* (p. 283 ff.)

² Or more

³ Again we must interpret could as covering both causal and logical possibility

⁴ Or all but one thus covering multiple relations

⁵ With one reservation mentioned below (p. 132)

⁶ This is the only sense in which it might be maintained with any show of reason that all relations are essential to their terms i.e. it might be said that their terms could not exist without them on the ground that if they were at all different qualitatively they would not be the same terms. In the other sense of essential mentioned earlier (p. 121) it would be simply absurd to say that all relations are essential to their terms

There are two fallacies to be avoided in connection with this sense of internal. In the first place it is clear that if A and B are related at all they must both be different in one respect at least from what they would be in the absence of the relation inasmuch as they both possess the characteristic which they assuredly would not otherwise possess of standing in this relation. But obviously this is not what is meant by the internal theory of relations otherwise it would be a mere tautology of no value. It obviously means that the terms would be different in some other respect or respects also if the relation were not present and we cannot straightway infer this from the fact that they are different in this one respect. If any persons have been led to believe or think they believe in the internal theory of relations by confusing these two propositions they have committed a fallacy.

Secondly granted that A and B are related by the relation r and something else C is not related to B by the relation r it follows necessarily *a priori* that C is not identical with A but we cannot therefore conclude that it is impossible that A could be what it is if it did not stand in the relation r to B. That is the propositions A is related to B by r and C is not related to B by r entail C is not A by the same principle as governs the ordinary second figure syllogism but it does not follow that the proposition C is not related to B by r would entail C is not A apart from the proposition that A is in fact related to B by r . To argue that it would is like concluding that because in the syllogism $P a M S e M S e P$ the conclusion follows from both premisses therefore it follows from the second alone.¹ This fallacy seems to be involved in Dr McTaggart's argument in *The Nature of Existence*² to the effect that no quality of a substance could be different while leaving the others unchanged. For he includes under quality what I have called relational characteristics i.e. the characteristics which consist in standing in specific relations.

I do not think however that these two mistakes are the whole or the main cause of the prevalence of the belief that relations are internal in the seventh sense of the word.³ That

¹ The fallacy is refuted at length by Professor G. E. Moore (*Philosophical Studies* p. 289 ff.)

² Vol. I § 109

³ I.e. in the sense in which it signifies that they make a difference to their terms or that their terms could not both have been what they are if the relation had not been present.

sense the one under d_____on is perhaps the most important sense in which relations are maintained to be internal. If the internal view is true in this sense it means that all reality is an interconnected system such that a difference in one part would always involve a difference in others.

There are two main reasons which account for the wide prevalence of the view

(a) The first depends on a confusion between the sixth and the seventh senses of internal or on the assumption that the sixth sense implies the seventh. It seemed impossible to conceive that a relation could really relate its terms could as e.g. Bradley puts it hold its terms together if it were not somehow rooted in their nature and we have seen already that all relations must be at least partly rooted in the nature of their terms if by that is meant as I suppose is the case that they must follow from their terms or from a set of conditions including their terms as relevant and even essential parts. But if a relation was thus rooted in the nature of its terms it seemed clear that it could not be absent without the nature of the terms being different¹. So much indeed would follow logically from the ordinary rules of the hypothetical syllogism if it were the case that the nature of the terms constituted the *whole* condition from which the relation followed. For in that case supposing *a b* to stand for the nature of the respective terms and *r* for the relation we could truly say—if *x y* are *a b* then *x* and *y* are related by *r* and from that follows—
if *x* and *y* were not related by *r* then they would not be *a b*
i.e. if the relation were absent both the terms could not be what they are. This is clearly the case with the very numerous relations which do admittedly follow solely from the nature of their terms. If it is a fact that A is half of B or that A is similar to B in quality *x* we have a relation which follows solely from the nature of the related terms and these relations could certainly not be absent without A or B being different from what they are². It would not indeed be necessary for both terms to be different but at least one must be so.

But the position is changed when we consider cases where the terms only constitute part though an essential part of the

¹ E.g. Taylor (*Elements of Metaphysics* p. 148) insists that unless a relation makes a difference to its terms (my seventh sense) it can have no foundation in their nature (my sixth sense).

² In respects other than the characteristic of standing or not standing in the relation in question.

conditions from which the relation follows. In that case we cannot say that one of the terms would have to be different if the relation were absent for since the relation is not due to the nature of the terms alone but to other conditions also we can only argue that if the relation were absent *either* one of the terms *or* one or more of these other conditions would be different. Hence the seventh sense does not as might have been thought follow from the success of the arguments used to establish the sixth for these only succeeded in establishing partial not complete determination of the relation by its terms and the argument from the sixth to the seventh sense is valid only if the determination is complete not partial.

(b) What has been perhaps even more influential in leading to the widespread adoption of this view of relations is the conception of the world as a causal system a conception so strongly suggested and supported by physical science at the time when this doctrine of relations was at its zenith though much less strongly to day. But owing to its length I shall for the present defer my discussion of the argument from causality.

Now it is clear that every existent known by us is related to every other by some relation which is internal in the seventh sense. For every existent that we know is similar to every other in some respect if only in the respects of existing in time and conforming to the necessary truths of logic and similarity is a relation of such a kind that wherever it relates two terms it is true that if it had been absent the terms could not have been the same in other respects. But this does not prove that reality is a system of the kind contemplated by the advocates of internal relations for most relations are at least *prima facie* not of this character e.g. the spatial relations of a thing to other things might well it would seem be different even though its other characteristics were the same.

It is worth noting however that in some instances of such relations (e.g. half of) we can from knowledge of one term plus the fact that it stands in the relation to something infer some determinate characteristic in the other term while in other instances of relations which are also internal in the seventh sense e.g. difference ¹ we can draw no such conclusion ²

¹ Where it is a relation at all

² At least directly. This is not meant to exclude the possibility that knowledge of the full nature of the term would imply knowledge of everything else.

We cannot tell what colour anything has from the mere knowledge that something blue is different in colour from it. This gives us then an eighth sense in which a relation might be internal or be held to be internal i.e. if the relation is conceived as such that from a knowledge of one term and the relation in which it stands to the other term we can infer with logical necessity that the other term possesses a certain *determinate*¹ or relatively determinate characteristic other than the characteristic of standing in the relation in question. Some of the relations of every existent are internal in this sense since every existent is similar to some others and the relation of similarity if defined with sufficient precision is internal in the eighth sense².

But we must remark here that while it is true that in any case in which A and B really are similar or A is half the size of B the relation could not have been different without one of the terms being different it may still also be true that A could have existed without standing in that relation at all. For B may not be essential or even relevant to A though granted B A and B could not but stand in the relation. It is obvious that if there is a particular lump of iron on Mars twice the size of a given lump of iron here the two lumps of iron are internally related in the seventh and eighth senses yet the existence of the one lump is in no way essential to the other's existence and does not even make it the size it is. It may be true that the first lump would have been what it is if the other had not existed at all though granted its existence it must stand in that relation to it. But advocates of internal relations undoubtedly commonly suppose their doctrine to imply that when two things are internally related the one could not have existed without standing in that relation to the other. So we have a ninth sense of internal relation according to which A is internally related to B by the

¹ In the case of most relations we can infer from the knowledge of the relation that both terms are characterised by some value of a certain *determinable*.

² It might be thought that *all* things are internally related to each other in the eighth sense of internal since as we have seen they are all related by similarity in some respect or other but this does not follow because everything is certainly not similar to everything else in any determinate characteristic (in the sense in which the term is used in Johnson's *Logic* as opposed to *determinable*) and I have defined the eighth sense as applying to determinate or relatively determinate qualities not to determinables or to purely formal logical characteristics.

relation r when A could not exist unless B existed and was related to it by r

Finally we may distinguish between causal and logical dependence thus giving a tenth sense of internal in which one term is not only dependent but logically dependent on its relation to the other and *vice versa*. If as has often been held causality is or involves a species of logical entailment this tenth sense follows from the ninth. Most advocates of the internal relations view seem to have held that any particular thing was not only causally but logically dependent on the other things to which it was related for they insist that it is self contradictory (i.e. logically and not only causally impossible) without them. Anybody who maintained that everything was internally related in this sense to the rest of reality would mean that reality was a system such that any one part of it would ultimately be found to be logically incoherent and self contradictory if abstracted from the rest but when seen in the light of the whole would be seen to follow from it by an intelligible logical nexus and not merely coexist with the other things in the universe as a matter of fact. This view seems altogether absurd to many thinkers at the present time but I am not by any means sure that the prevailing tendency of thought is a right one and at any rate the important part the view has played in the history of philosophy is sufficient justification for examining it.

To sum up we must admit that all relations are internal in the first and fourth senses i.e. they always presuppose terms which have the characteristic of standing in the relation in question and they involve a genuine though perhaps very partial and limited unity between their terms. We can positively deny that any relations are internal in the third sense because relations are not qualities and also in the fifth sense because they presuppose some positive character in the terms related which is not itself constituted (or even modified) by the relation the nature of no term being exhausted by any one relation. We can also deny that *all* relations are internal in the sense of essential to their terms (second sense) while admitting that some are though we must add that the distinction between essential and unessential is in most cases one rather of degree than of kind. We can assert that every relation follows either logically or causally from the nature of its terms or from a set of conditions including as necessary factors its terms (sixth sense) but we cannot infer from this that

either of the terms could not be the same in other respects if the relation were not present. In this (the seventh) sense we have neither proved nor disproved the proposition that all relations are internal similarly with the eighth ninth and tenth senses distinguished by me. These await further discussion. They seem to constitute what idealist philosophers have chiefly in mind when they assert that all relations are internal.

Obviously what I have said about all relations will if true apply to any specific relation or relations involved in cognition but can we say anything further about such relation or relations that does not just follow from the general nature of all relations? Now it is very difficult to determine exactly what are the relations involved in cognition. It is sometimes contended that the object of cognition is a proposition not a reality but in discussions concerning idealist epistemology the term object of cognition is never or hardly ever used in that sense and it is certainly the case that if we know a proposition to be true we thereby know in a very important sense of the word the objective fact to which the proposition refers. What is the relation between this and the cognition of it? If the fact is something appertaining to an event or continuant in time there will no doubt be temporal and probably causal relations between them but is there any relation which can be described as specifically cognitive? Our answer to this question will depend partly on our analysis of knowing (or our denial that it can be analysed) but in any case there is one relation (though there may be more) which must be regarded as specifically cognitive i.e. it cannot occur except in connection with a cognition¹ and must occur in so far as the aim of a cognition is achieved.

The relation of which I am thinking is the one which always subsists between a true judgment and the fact to which it refers and never between a false judgment and anything objective the relation which constitutes the truth of a judgment. It has commonly been given the name *correspondence* and in the absence of another name in use I shall employ this word though it is unfortunately a misleading expression for the relation cannot be reduced to copying likeness parallelism in structure, or anything of that kind². The actual relation I think is unique and irreducible. We know perfectly well

¹ I use cognition here as elsewhere as a general term to cover knowledge judgment belief opinion.

² In ch. V sect. 1 I call it 'accordance'.

what it is in particular cases at any rate since we always understand what is meant by a judgment being true of¹ something but I do not think it can be defined or further analysed. At any rate I have seen no definition or analysis that gives any promise of being successful. Such a relation between the non-objective and the objective sides in cognition must be admitted by anybody who allows an objective reference to cognition at all and distinguishes between judgment and its object since they are obviously not altogether unrelated and therefore if different at all must be connected by some specific two termed relation but it is not so clear what is the non objective term of the relation. That is why I could only describe it in a sentence by deliberately using judgment in an ambiguous sense. Some persons would hold that the relation subsists between a proposition and something objective in the fuller sense (for judgment is sometimes used to mean what Cambridge philosophers call proposition) the proposition being conceived as a separate entity from either the judging of it or that to which it refers others would regard propositions as merely a convenient fiction but do not leave it so clear what are the terms between which the relation subsists. An alternative would be to say that the relation subsists between my judging or better a certain characteristic of or element in this judging and that to which my judging refers. But that there is such a relation cannot reasonably be doubted. Now it is possible to prove that this relation is internal in the seventh and eighth senses of the expression internal relation² and fortunately this proof is unaffected by the view we take as to the non objective term which is related to the objective fact in this way (at least I know no view on this question which could affect it).

¹ True of X = bearing the relation of correspondence to some fact about X. I should have liked to substitute the expression true of for corresponding to to signify the relation but as was pointed out to me this expression while only definable as above in terms of the relation between a judgment and a fact describes that between a judgment and a subject of attributes.

² I.e. in the sense in which an internal relation means a relation the terms of which could not both have been what they are if the relation had not been present and the sense in which it means a relation such that from a knowledge of one term and the relation in which it stands to the other term we could infer with logical necessity that the other term possesses a certain determinate or relatively determinate characteristic other than the characteristic of standing in the relation in question.

The relation is internal in the seventh sense for it is certainly true that one of the terms would be different if the relation were lacking. The terms are the judgment that S is P and the fact $S-P$. In any case of a true judgment we can always rightly say that the relation of correspondence could not have been absent without either the judgment or the fact judged about being different (whether we interpret the first term of the relation the judgment as being my judging as characterised in a certain way or as being a proposition). If I judged that S is P and S really is P the relation of correspondence must necessarily subsist between the two terms in question and it could not be absent unless either I had judged differently or facts were different in regard to S and P .

This is obviously a case of logical entailment and not merely of causal following. My judgment being what it is and S being what it is it follows *a priori* that my judgment corresponds to the fact $S-P$. The premisses being what they are there can be no more escape from this than from any logically necessary inference.

The relation is internal also in the eighth sense for from the fact that I judge S is P and the fact that this judgment corresponds to something it follows logically that S really is P and from the fact that S is P and the fact that I have judged truly about (i.e. made a judgment corresponding to) the relation between S and P it follows logically that I have judged S is P .

But as I argued earlier we cannot infer from all this any sweeping conclusions either in favour of or against idealism. I do not know that the proof I have given has any important metaphysical or epistemological consequences but the fact that the relation in question is of this character is at least as well worth knowing in itself as e.g. a generalisation about a species of plant or animal in Biology that has no further obvious significance for general theory. All that I have said will apply equally if we regard the non objective term in the relation as a subsistent proposition or in any other possible way as can easily be seen by substitution in the arguments. If as is often held knowing as opposed to uncertain or erroneous judgments entails a relation between mind and object known other than those I have mentioned that relation will likewise be internal in the sense given for the same reasons but whether there is such a further relation peculiar to knowing I am not clear.

It might be objected that while the relation was internal in the seventh sense it was not internal in the eighth sense because the inferences in question could never be made in practice because I could never in fact be in a position in which I could infer that S is really P from the premisses that I judge S is P and that my judgment corresponds to fact or from the premisses that S really is P and that I make a judgment corresponding to this fact infer that I judge S to be P. It may be argued that I can never make these inferences because I cannot know my judgment that S is P to be true without already knowing S-P to be an objective fact and because I cannot both know S-P to be an objective fact and know myself to make a true judgment as to this fact without already knowing that I make the judgment S is P. But if a logical relation of entailment subsists the question whether it is ever actually used in inference is quite irrelevant. The postulates of Euclid entailed Pythagoras' theorem just as truly 3 000 years ago before anyone had drawn the inference as they do to day and would still entail it if the only intelligent beings in the universe had been so constituted that it was impossible from the nature of their minds that the inference ever could occur to them. Further we may remark that although I could not draw these inferences in my own case at the time of making the judgment I both can and often in fact actually do draw them in regard to other people. I often infer that S-P is an objective fact because somebody has judged S to be P and because owing to my estimate of his character intelligence and opportunities of acquiring correct information on the subject I think that his judgment corresponds to the facts. (Any uncertainty in this inference is due not to the absence of a relation of logical entailment but to the uncertainty of the premisses or usually the second premiss.) Again from my knowledge that S-P is a fact and my memory that I had e.g. given full marks to a candidate in an examination for his answer about S-P thus implying that it was correct and so corresponded to the facts or praised a man for his truthfulness in admitting a fact which was to his own disadvantage I might easily draw the conclusion that he answered that S was P without remembering what he actually did answer. And I could make similar inferences in connection with past judgments made by myself.

That such inferences are not to be dismissed as mere tautologies seems clear to me both from the examples given which

clearly involve not merely a verbal but a real advance from the premisses to the conclusion at least as much as other equally simple examples of *a priori* reasoning e.g. syllogisms can be said to do and on general grounds. For the fact that I judge S to be P and the fact that S is P are certainly different facts and one fact does not include the other since I can judge S to be P without S really being P and S may also be P without my judging it and if we admit as we surely must that between a true judgment and the fact to which it refers there is a relation which makes the judgment true it is again obvious that the fact that the judgment stands in this relation is a different fact from either the fact that I judge S-P or the fact that S is P. This third relational fact might perhaps be identified with the fact that the judgment is true but that my judgment is true is obviously a different fact from either the fact that I make the judgment or the fact that S really is P since either of these may be facts without the first being so. And if these three are different facts from each other separately I do not see how one of them can be included in the other two taken together¹. The view I am maintaining could only be overthrown by denying that there was a specific relation which held between every true judgment and the fact to which it refers and this seems plainly untrue. But as I have said our conclusion though perhaps of some interest does not provide any argument for idealism.

But the cognitive relation cannot be regarded as internal in the ninth or tenth senses * unless we suppose epistemological idealism to have already been established on other grounds. *Prima facie* it seems clear that at least most facts known by me

¹ Even if we held that my judgment S-P is true means simply I judged S-P and S is really P and nothing more there would still be some relation of correspondence between the judgment and the fact S-P and the fact that they are so related would still be a third fact though this third fact would no longer be identified with the fact that the judgment is true. So we could still argue I judged S is P my judgment corresponds therefore S was P etc. It is obvious that since the judgment and the fact S-P are at any rate different facts they must be related and further that there is some relation between them which holds in the case of all true judgments but never in the case of a false one.

* I defined the ninth sense as the sense according to which A is internally related to B by the relation r when A could not exist unless B existed and was related to it by r and the tenth sense as the sense according to which if A is internally related to B it is *logically* dependent on B and its relation to B (pp. 135-6)

do not depend for their being on my knowing them or on my making a judgment about them which corresponds to them and it also seems clear that my judgments do not depend for their being on the presence of facts to which they correspond since if they did I could never make a false judgment a disability from which I unfortunately do not suffer I could not indeed *know* that S was P without S-P being a fact but that is only because we should not use the term *know* in that case but my psychological state might be the same though the judgment was erroneous and there was no corresponding fact And in any case no reason has been given to show that it would not be possible for my cognitive state to be dependent on its object in the ninth and tenth senses without the converse propositions being true also

Perhaps one of the causes which has led to the adoption of epistemological idealism is that people saw that the cognitive relation was internal in the seventh and eighth senses¹ and confused this with the assertion that it was internal also in the ninth and tenth senses That this does not follow necessarily is clear from the instances given The relations half of exactly similar in a given quality to opposite in sex to are internal in the seventh and eighth but not in the ninth and tenth senses²

§ II VARIOUS IDEALIST ARGUMENTS FOR THE THEORY OF INTERNAL RELATIONS

Let us now examine some of the arguments used by the leading thinkers with whom the theory of internal relations is associated in order to see whether it is possible to establish

¹ I.e. in the sense in which an internal relation means a relation the terms of which could not both have been what they are if the relation had not been present and the sense in which it means a relation such that from a knowledge of one term and the relation in which it stands to the other term we could infer with logical necessity that the term possesses a certain determinate or relatively determinate characteristic other than the characteristic of standing in the relation in question

² From the proposition that I am male and that I am opposite in sex to Queen Anne it can be inferred that Queen Anne is a woman but it does not follow that I am dependent for my existence on Queen Anne or *vice versa* Nor does this follow from the fact (seventh sense of internal) that if the proposition Queen Anne and I are opposite in sex had been false, one of us would have had to be intrinsically different from what we are

the view that all relations are internal in any or all of the last four senses

(1) In the first place it seems to be supposed by Mr Bradley and Professor Joachim¹ that to admit external relations is to make the relation a kind of third term separate from the other two which it is supposed to relate. Such a view by making relations a kind of *things* would deny the distinctive character of relations altogether and would quickly meet its nemesis for the relation having become really a term would require other relations to connect it with the other terms and so on *ad infinitum*. But I know of no advocates of the theory of external relations who do hold this mistaken view nor do I see any reason why anybody who denied that relations were internal in any or all of the senses² still under discussion should be supposed to imply such a view. Mr Bertrand Russell's theory of types which is certainly a most important part of his logical doctrine quite definitely implies that relations as belonging to a different logical type from terms cannot be treated in the way just criticised by the idealists. Perhaps the confusion is due to the misleading effect of the spatial metaphor we cannot say that A is external to B in the spatial sense unless it is altogether outside B but external cannot be used in the spatial sense of relations. It is quite illegitimate to pass as Bradley apparently does from the denial that a relation is ever external in the sense of being a sort of third term to the assertion that all relations are internal in the sense of making a difference to their terms. Such are the bad effects of trying to solve the problem without first distinguishing the different senses in which a relation may be called internal or external.

(2) It is contended that we can sometimes argue from one fact to another and that this would be impossible if the two were not internally related³ (apparently in all the last four senses of the term). This, if true could not prove that all relations are internal or even that most or all facts are internally related in these senses. As is well known the circumstances under which

¹ *The Nature of Truth* p. 11

² Or in any of the others except perhaps the first, i.e. if he should deny or ignore the fact that the terms of a relation have the characteristic of standing in that relation thus cutting relations adrift from their terms. Bradley seems to think that you can prove relations to be internal in the sense of making a difference by simply showing that in some loose sense they must qualify their terms.

³ E.g. Bradley *Essays on Truth and Reality* p. 259

we can argue *a priori* from one or more facts to another fact are extraordinarily limited and the features of real things in regard to which this is possible for us seem always to be of the type commonly described as formal characteristics. The argument would therefore only be valid against anyone who held that not only some but all relations were external in these senses.

(3) In regard to the relation between cognition and its object it has been argued that it is obvious that one term at any rate the object cognised makes a difference to the other and that it is absurd to suppose that there could be a relation which was so to speak internal at one end and external at the other.¹ Such a supposition seemed absurd to me also as long as it was stated in general terms but when I analysed it in accordance with the various senses of internal at issue now the absurdity seemed to disappear.² There is nothing absurd that I can see in supposing e.g. that A might be different because of its relation to B without B being different because of its relation to A or that A might depend for its existence on B but not *vice versa*. If these propositions are absurd at any rate their absurdity is not self evident and some proof is required. Till such proof is given we cannot possibly dismiss them as necessarily false and such a proof has so far as I know not been attempted at all.

(4) The advocates of the internal theory of relations do succeed I think in showing that all relations are partly dependent on and determined by characteristics of their terms (sixth sense) and most of their endeavours seem to be directed to this end but then they apparently forget that they have only shown the relations to be *partly* determined by their terms and erroneously assume that from this it follows that the relations are internal in the seventh sense i.e. that the terms could not be the same if the relations were different. But the inference as I have shown above³ would only be valid if the relations in which they stand could be proved to be wholly determined by the terms related. The advocates of the internal relations theory also fail to distinguish causal and logical necessity without supporting by argument their identification.

¹ Id. p. 337 n. Joachim *The Nature of Truth* p. 50 n.

² I am not concerned to deny that it might be absurd if maintained in regard to some of the earlier senses of internal about which we have come to a decision already.

³ pp. 133-4

(5) It is argued by Bradley that in feeling we have a unity which is non relational and therefore cannot be fitted into any scheme of external relations ¹ But the fact that in feeling we do not recognise relations does not prove that there are no relations or even no external relations present either within the total feeling state or between this state (or elements in this state) and something else This argument only seemed conclusive because Bradley already assumed a form of idealism and refused or failed to distinguish between the true proposition that we do not know the relations of our feeling and the false proposition that it has no relations Even if I cannot have feelings without in some sense knowing that I have them I certainly can have them without distinguishing all their relations There is indeed an important element of truth in Bradley's contention namely that feeling cannot be reduced to a set of terms in relation I think this is true of feeling as of everything else but this does not prove that no relations are present or that all its relations are internal in the senses under discussion

(6) Bosanquet says that the all important argument is that relations are true of their terms They express their position in complexes which positions elicit their behaviour their self maintenance in the world of things ² But we cannot pass from the fact that relations (or more correctly propositions ascribing relational characteristics) are true of their terms to the view that relations are internal in the full sense maintained by Bosanquet himself and the latter part of the argument could never prove that all relations affected their terms only that some did which as far as I know no one has denied We can only suppose that Bosanquet spoilt his case by writing this passage somewhat hastily

(7) Bradley as is well known claims to discover a contradiction in the very notion of relation ³ but while he denies ultimate validity to any judgment asserting or involving relations (i.e. to all judgments without exception) he evidently holds that it is a good deal nearer the truth to regard relations as internal than as external This in a philosophy according to which no judgments are either wholly true or wholly false is a very important distinction It is indeed only a distinction

¹ *Essays on Truth and Reality* p 237 v also Joachim *The Nature of Truth* p 26

² *Logic* 2nd ed pp 278-9

³ V *Appearance and Reality* chs 2 and 3

we can argue *a priori* from one or more facts to another fact are extraordinarily limited and the features of real things in regard to which this is possible for us seem always to be of the type commonly described as formal characteristics. The argument would therefore only be valid against anyone who held that not only some but all relations were external in these senses.

(3) In regard to the relation between cognition and its object it has been argued that it is obvious that one term at any rate the object cognised makes a difference to the other and that it is absurd to suppose that there could be a relation which was so to speak internal at one end and external at the other.¹ Such a supposition seemed absurd to me also as long as it was stated in general terms but when I analysed it in accordance with the various senses of internal at issue now the absurdity seemed to disappear.² There is nothing absurd that I can see in supposing e.g. that A might be different because of its relation to B without B being different because of its relation to A or that A might depend for its existence on B but not *vice versa*. If these propositions are absurd at any rate their absurdity is not self evident and some proof is required. Till such proof is given we cannot possibly dismiss them as necessarily false and such a proof has so far as I know not been attempted at all.

(4) The advocates of the internal theory of relations do succeed I think in showing that all relations are partly dependent on and determined by characteristics of their terms (sixth sense) and most of their endeavours seem to be directed to this end but then they apparently forget that they have only shown the relations to be *partly* determined by their terms and erroneously assume that from this it follows that the relations are internal in the seventh sense i.e. that the terms could not be the same if the relations were different. But the inference as I have shown above³ would only be valid if the relations in which they stand could be proved to be wholly determined by the terms related. The advocates of the internal relations theory also fail to distinguish causal and logical necessity without supporting by argument their identification.

¹ Id. p. 337 n. Joachim *The Nature of Truth* p. 50 n.

² I am not concerned to deny that it might be absurd if maintained in regard to some of the earlier senses of internal about which we have come to a decision already.

³ pp. 132-4

(5) It is argued by Bradley that in feeling we have a unity which is non relational and therefore cannot be fitted into any scheme of external relations ¹ But the fact that in feeling we do not recognise relations does not prove that there are no relations or even no external relations present either within the total feeling state or between this state (or elements in this state) and something else This argument only seemed conclusive because Bradley already assumed a form of idealism and refused or failed to distinguish between the true proposition that we do not know the relations of our feeling and the false proposition that it has no relations Even if I cannot have feelings without in some sense knowing that I have them I certainly can have them without distinguishing all their relations There is indeed an important element of truth in Bradley's contention namely that feeling cannot be reduced to a set of terms in relation I think this is true of feeling as of everything else but this does not prove that no relations are present or that all its relations are internal in the senses under discussion

(6) Bosanquet says that the all important argument is that relations are true of their terms They express their position in complexes which positions elicit their behaviour their self maintenance in the world of things ² But we cannot pass from the fact that relations (or more correctly propositions ascribing relational characteristics) are true of their terms to the view that relations are internal in the full sense maintained by Bosanquet himself and the latter part of the argument could never prove that all relations affected their terms only that some did which as far as I know no one has denied We can only suppose that Bosanquet spoilt his case by writing this passage somewhat hastily

(7) Bradley as is well known claims to discover a contradiction in the very notion of relation ³ but while he denies ultimate validity to any judgment asserting or involving relations (i.e. to all judgments without exception) he evidently holds that it is a good deal nearer the truth to regard relations as internal than as external This in a philosophy according to which no judgments are either wholly true or wholly false is a very important distinction It is indeed only a distinction

¹ *Essays on Truth and Reality* p 237 v also Joachim *The Nature of Truth* p 26

² *Logic* 2nd ed pp 278-9

³ *V Appearance and Reality* chs 2 and 3

in degree of truth or perhaps more accurately of error but then according to that philosophy it is only a distinction of degree which separates the most certain truths from the most groundless and stupid errors. And that the internal relations view though not ultimately true for him is regarded by him as truer than the external relations view and as being what we must accept not indeed ultimately but in our intellectual world seems clear¹. While he holds that even internal relations are not free from self contradiction he directs his criticisms mainly against the external view. Further if it could be shown as he thinks he has shown that relations are unreal the result would be a monism similar to if more far reaching than that implied by the internal view and would provide a more promising ground for the establishment of the inseparability of objects from a mind which knows them. For if mind and object known cannot be legitimately regarded as related the only alternative seems to be to regard them as blended in some supra relational unity. They are obviously not quite separate since if they were knowledge would be impossible even at the phenomenal level and therefore they must be united somehow. This at any rate is the alternative adopted by Bradley. That such a unity cannot be really thought out by us is not a fatal objection since we may well have a faint glimpse of an ideal of thought which we cannot determine in detail and since every alternative that suggests itself has been shown according to his arguments to be self contradictory. And such a view would like the internal relations view as usually maintained carry with it the implication that anything is internally incoherent when taken apart from everything else or to speak more correctly in terms of Bradley's philosophy imply that the proposition that this is so is far truer than any proposition which contradicts it. So Bradley is commonly included among the supporters of internal relations. Bosanquet whose views are similar to Bradley's argues not that relations are unreal but that they are not external without implying that there is any marked difference between his views and Bradley's on the subject.

¹ E.g. in a note added in the second edition of the *Logic* he says that in our intellectual world we must take every element as qualified internally by its relations to the whole so that everything will imply all its relations while adding that our whole world as merely intellectual is not ultimately real. v also *Essays on Truth and Reality* p. 239 ff.

though if he had differed on such an important point he could hardly have failed when deliberately discussing Bradley's theory of relations to say so

Bradley's actual argument against relations I need not discuss at length because it has already been answered by several different writers¹ and I do not think I have anything really fresh to add. The contradictions which he alleges seem to arise through supposing that a relation must be treated either as a quality or as a third term. For in the former case it will qualify but not relate its terms and in the latter case it needs a fresh relation to link it to each term and so *ad infinitum*. One might similarly argue that it was impossible to tie two things together with string because you would need another piece of string to tie the string to each object and so on for ever. The argument would be valid if each piece of string used were so defective that it broke in the middle similarly Bradley's objection would be valid of relations if and only if they did not fulfil their function of relating. Only then would they need another relation to do the relating for them. But in that case they would not be relations. If in $A \text{ } r \text{ } B$ r is really a relation it relates A and B itself and does not require new relations to connect it to either for the relational characteristic of standing in the relation is not itself a relation. To say that because A is related to B by r A must stand in the relation r to B and therefore must be characterised by (i.e. stand in the relation of having as characteristic to) the relational characteristic of standing in the relation r to B and be characterised further by having the characteristic of being characterised by the relational characteristic of standing in the relation r to B is only to say the same thing over again in different words so that the so called different relations which are supposed to constitute the infinite regress are really only more and more cumbrous ways of expressing the same relation.

The same fallacy in a subtler form appears in Bradley's argument that each term has a double character as both supporting and as being made by the relation so that these two aspects will be again related and so on *ad infinitum*². The

¹ Hobhouse *Theory of Knowledge* ch 12 Schiller *Humanism* essay XI Stout *Studies in Philosophy and Psychology* ch 9 Cook Wilson *Statement and Inference* vol II p 692 ff

² *Appearance and Reality* p 31 cf Taylor *Elements of Metaphysics* p 146

distinction so far as I can understand it is between A as abstracted from the relation and A as related. But what is the relation between these two aspects of A? Simply that the second includes besides the other characteristics of A the characteristic of standing in the relation while the first does not do so. But this will not generate a second distinct relation between them and so on *ad infinitum* unless it is assumed as before that A must have a relation to the characteristic of standing in any particular relation and that this relation must in turn be related to A by another relation.¹

Nor do I see any vicious circle in the fact that relations presuppose qualities and qualities relations. There is a kind of circle whenever it is true both that A implies B and that B implies A but it is not vicious unless we try to prove A by B though we can only prove B by means of A which is certainly not the case here. We have direct evidence in experience for both relations and qualities and do not need to prove the existence of the one by reference to the other.

But even if we could see no means of surmounting the difficulties raised by Bradley about relations most men would still think it infinitely more likely that there was some undetected fallacy in his arguments than that there was a fatal fallacy in everybody else's arguments on every subject whatever i.e. that all our judgments were false and self contradictory. According to the coherence theory itself relation being presupposed in all our judgments and in the very notion of a coherent system must surely be accepted as a valid conception. But it is not by any means clear what Bradley meant by saying that all our judgments are partly false. His critics understand false in its ordinary sense and are thus able to riddle him with objections but it seems clear that he is not using false in quite the ordinary sense of the term.² And it does seem to me a reasonable view to hold that all our judgments are inadequate meaning by this not merely that they do not tell the whole truth but that

¹ If A enters into the relation in time as a result of causation and the relation changes A in other respects then there will be a distinction between A as it was before its entry into the relation and A as it is afterwards and a kind of infinite regress will arise as a result of the infinite divisibility of time but this difficulty about causation does not seem to be what Bradley had in mind here and cannot be urged against relations as such.

² V below p. 209 ff.

they in some way misrepresent convey a wrong impression of the real. The forms we use in judgment and speech do after all suggest that relations and terms are two kinds of separate things and that reality is a set of such things whereas it is really a continuum from which the relations and the terms alike are mere abstractions. What is given to us in experience is not terms by themselves (as thinkers prior to Bradley seem often to have supposed) nor relations plus terms nor a mere undifferentiated continuum (a blooming buzzing confusion as suggested by William James in one passage) but a varied and interrelated continuum and we have no right to suppose that the methods of abstraction we employ in order to analyse out that continuum will represent with complete adequacy even the general nature of our own experience. Relations and terms are no doubt present in the real but they are not present as separate entities side by side yet we can hardly think of them discursively (as opposed to experiencing them) without thinking them as thus separate by an unjustified abstraction. This is partly due to the defects of language though I think myself it goes deeper than that. As Mr Bertrand Russell himself points out the fact that we have to use the same kind of symbols namely words for both terms and relations and that the word for a relation is as much a separate word an entity by itself as the word for a term inevitably conveys the impression that terms and relations have the same kind of being and that relations are to be regarded as just other terms¹. It is difficult in practice to avoid making the assumption that every word we use stands for a separate single entity but the assumption is unjustified. If we once view relations as terms we are involved in Bradley's infinite regress yet in speaking about them at all we are really treating them as if they were terms. Not only is it the case that reality can not be reduced exhaustively to a set of terms and relations but that every proposition we lay down about anything concrete suggests a separateness that is not to be found in the real. I do not say that all our judgments are therefore partly false but I do say that they are metaphysically misleading. But one thing is clear what we have said may involve an amendment of the conception of relations but it does not involve their denial.

(8) Bradley's most important argument against relations

¹ *Contemporary British Philosophy First Series* pp 369-70

is however interpreted by Professor Campbell¹ as being to the effect that the assertion *A is B* is tautological if *A* and *B* are the same and self contradictory if they are different. This self contradiction could only be removed by thinking of them as diverse but necessary expressions of the same system but we can only connect them externally without really seeing the logical necessity of the connection and therefore the contradiction cannot be removed by us. Now I admit that our intellect does demand such a logically connected intelligible system but I cannot see that there is any actual contradiction in denying it. For when we say that *A is B* or is related to *B* we do not mean that *A* is identical with *B* but that it is qualified by *B* or stands in relation to *B*. Professor Campbell says that if we distinguish the *is* of predication and the *is* of identity and thus maintain that *A is B* really means *A has the quality B* we have not escaped the contradiction for *has B* must = *is* such as to have *B* so that we are now asserting the identity of *A* with such as to have *B* and the same difficulty arises again but surely if the *is* of predication is distinct from the *is* of identity at all it is distinct in the proposition *A is* such as to have *B* and we therefore do not in this proposition assert that *A is identical* with such as to have *B*.

Thus Professor Campbell's reply assumes that his position has already been admitted by us. It is open to him to contend that all predication presupposes system but I do not see how this can be established by finding formal contradictions between identity and difference. And even if it be the case as Professor Campbell thinks that we cannot predicate *B* of *A* without assuming that *A* and *B* follow with logical necessity from the same system the fact that we cannot see the logical necessity still would not make our assertion self contradictory. It is not self-contradictory to say I know (or believe) that *B* follows from *A* though I have not the least idea why or how it does so or *A* and *B* must follow necessarily from some ground though I do not know what.

Bradley holds that differentials must contradict each other except when combined in a system but it seems to me that it would be more correct to say that they cannot contradict each other except in a system, i.e. the notion of a contra-

¹ *Scepticism and Construction* p 7 ff

diction between A and B presupposes some kind of system¹ with a fixed place for A which is so to speak invaded by B. Alive and not alive do not contradict each other *per se* but only when applied to the same subject at the same time. Two contradictory colours can perfectly well exist together unless they are ascribed to the same place within the same system of space. It is not that differentials contradict each other *unless* brought in a system but that they only contradict each other when one of them is put in the wrong place in a system.

§ III CAUSALITY AND THE PROBLEM OF INTERNAL RELATIONS

We now pass on to what is perhaps the objection most strongly felt by opponents of the external relations view. It is that the view in question makes relations mere conjunctions (as Bradley puts it) and that mere conjunctions are irrational. Bradley bases on this argument the view that relations must be internal in the sense of being grounded in their terms (sixth sense) and then assumes² that because they are internal in this sense they must also be internal in the sense of affecting the terms i.e. our seventh sense.

The process and its result to the terms if they contribute nothing to it seems really irrational throughout. But if they contribute anything they must surely be affected internally.³ He says that the point which should be emphasised in regard to the doctrine of external relations is that everything ordinarily covered by the word implication is here utterly denied.⁴ Professor Taylor likewise says. If no relation in the end makes any difference to its terms and thus has no foundation in their nature it becomes a standing miracle how or why the terms should enter into relations to which they are all the time absolutely in

¹ Though not necessarily a fully intelligible system or a universal system comprising all reality.

² Wrongly as I contend v above pp 133-4.

³ *Appearance and Reality* p 575.

⁴ *Essays on Truth and Reality* p 259 cf Professor Campbell *Scepticism and Construction* p 9 ff. We need make only the simplest ideal experiment to discover that to write differences *per se* or simply is abhorrent to thought. On the other hand their union as connected expressions of a systematic identity seems not only abstractly intelligible but also to represent plainly the goal of the intellect in actual practice.

different ¹ Professor Joachim ² argues that the theory of external relations leaves all relations of things in the position of arbitrary and irrational coincidences so that external relation is not an answer to the problem how things can be related and yet not lose their independence but only a name for the problem to be solved ³ Bosanquet said in 1913 of Bradley's theory of relations What he in principle refuses to accept I understand to be bare conjunction that is the bringing together of different without mediation by any analysis of their conditions satisfactory to thought and cites in his favour the fact or supposed fact that every science rejects relatively bare conjunctions that is such conjunctions as are presented by empirical observations Is there any man of science he asks who in his daily work and apart from philosophical controversy will accept a bare given conjunction as conceivably ultimate truth? ⁴ It seems clear that the irrationality of which these thinkers complain would only disappear if all relations could be regarded as following logically from their terms or from a whole in which their terms were included To satisfy them relations would have to be internal in the tenth as well as in the seventh eighth and ninth senses of the word All this seems to assume that the connection of different things and different events is capable of a rational explanation deducible *a priori* from their nature not indeed by our mind but at any rate by a mind which possessed real insight into this nature

The advocate of external relations would probably reply by boldly denying that there is any such problem as that from which his opponents start He does not see why we should suppose the relations of things to be intelligible and doubts even whether the question as to their intelligibility has meaning at all Logical implication is for him not a relation that could hold between events in the real world He would say that even if it is the business of the scientist in some sense to look for causes this is not to seek to make intelligible what has happened or reveal its logical ground and it does not imply that the causes he finds have any internal *logical* connection with their effects but only that they always (or usually) are followed by them in fact To this controversy the key is the concept of causality and it will

¹ *Elements of Metaphysics* p 148

² *The Nature of Truth* p 44 ff

³ *Id* p 49

⁴ *The Distinction between Mind and its Objects* pp 59-60

therefore be necessary to devote a section to the latter. The older schools of philosophy usually assumed that the connection between cause and effect was a species of that between logical ground and consequent and from this it would follow that since everything in the world we know is directly or indirectly causally related to everything else the world is in some marked degree a logically intelligible system and that the nature of any one thing because logically connected with that of others is incomplete and internally incoherent when taken by itself apart from the causal system on which it depends. On that view causation¹ implies that different things by their very essence belong together otherwise an event in one could not stand in a relation of implication to an event in another. Against this it is now commonly asserted that there is no such thing as causation except in the sense of regular sequence.² On the issue between these opposing views or the compromise we adopt between them turns to a large extent the issue between the internal and external view of relations between monism and pluralism between a view like the coherence theory and the view that reality is a mere aggregate of intrinsically unconnected facts.

What I shall describe for the sake of brevity as the regularity view is stated by Mr Bertrand Russell when he says in *The Analysis of Matter* that to say that C causes E means simply that C is a set of conditions such that³ (a) whenever they are all fulfilled E happens and (b) whenever E happens they have all been fulfilled.⁴ On this view causality does not involve any connection whatever between cause and effect but that of regular sequence or concomitance. Mr Russell's statement may sound fairly innocent but it carries with it and is undoubtedly meant to carry with it the startling implication that if for instance A shoots B the shot has no more intrinsic connection with B's death than has my drinking tea or an earthquake at the other end of the world. The

¹ It is perhaps desirable to say that I use causation and causality as synonyms throughout.

² With a few relatively unimportant reservations.

³ It is highly obscure what can be meant by such that if not such as to cause this to happen. We might have a better statement of the view if we simply substituted the words of which it is true that. This would avoid the charge that Mr Russell is covertly re-introducing causation in the definition of it.

⁴ He adds that if his definition is to apply to the causes of ordinary speech usually will have to be substituted for always.

only connection consists in the circumstance that his death in fact follows it and would always or usually do so under specifiable conditions ¹

Other factors beside regular sequence or concomitance which are frequently supposed to be present in cases of causation by people who do not hold the regularity view are the following (1) The effect is held to be continuous with dependent on something in the cause so that the two do not merely happen in regular succession but are intrinsically connected with each other (2) The cause is held to explain the effect to answer not only the question—how?—but the question—why? so that the demand for causes is primarily a demand for reasons which implies that there is a logical connection between the two like that of ground and consequent such that the cause is at least part of the reason for the effect and helps to make the occurrence of the latter intelligible ² (3) The cause is held actively to produce or determine the effect in a sense in which the effect cannot be said to produce or determine the cause (4) Causality involves neces-

¹ The issue does not merely concern the meaning of the word cause but the question whether events commonly described as cause and effect relatively to each other are really related only in the way maintained by the regularity view or also in the way which I wish to maintain. If we could justify the view that they are related e.g. as logical ground and consequent then even if anybody still insisted that the real meaning of causation was regularity we might cheerfully make him a present of the word provided he admitted that cause and effect were connected by this relation of logical entailment as well as by the relation of regularity which according to him constituted causation. What an advocate of the regularity view contends is that only a small part of what we usually *think* we mean by cause is in fact true of anything for we certainly usually *think* we mean something more than regular sequence. What an opponent of the view contends is that other elements in what we think we mean are true of at least some of the events which we usually call causes and effects and this is what I shall try to show.

² The distinction between the first and the second point is only provisional. I cannot myself really think them apart or define intrinsic connection except in terms of logical entailment which would give me the second view but I must distinguish them here because there might be different views on this point e.g. Professor Alexander when he speaks of the cause as 'passing into' the effect might reasonably be interpreted as asserting intrinsic connection and yet he emphatically denies that causality involves any sort of logical entailment. In fact I think very many people feel that cause and effect must be intrinsically connected in some way not, as far as I know clearly defined and yet would shrink from assimilating it to the logical connection of ground and consequent.

sity If there is a causal law connecting A and B it is not only the case that B does follow A but that it *must* follow A The explicit denial of this necessity is one of the chief points made by the advocates of the regularity view It seems to me that all these four points are really implied in the common sense view of cause

On the regularity view on the other hand the only objective relation signified by causality is that of regular sequence or concomitance ¹ The only arguments in favour of this view that I know fall under two heads (a) the difficulties involved in other views of causation (b) the fact that the regularity view keeps closest to the empirical evidence The first set of arguments cannot carry us very far for as Professor Broad points out ² the fact that we could not give a satisfactory statement of what else there was in causation would not prove that there was nothing else beyond regularity We may even be certain that there is more than regularity and yet not be clear what that more is The same thing occurs throughout philosophy he would be a bold man who said that he knew what justice is yet the merest tiro in philosophy could tell that some accounts of justice e.g. as helping your friends and harming your enemies are inadequate or false The advocate of the regularity view cannot find any good argument on these lines for the view that causation is only regular sequence ³ all he can do is to demolish

¹ Mr Ramsey and Mr Braithwaite whom I should class as supporters of this view strive to avoid any flagrant discrepancies with the denotation of the term cause as ordinarily used by including in their definition of causality also certain propositions to the effect that all or most people expect E to follow C (*Foundations of Mathematics* etc p 240 ff *Mind* NS XXXVI no 144 p 470) But these psychological propositions still leave regular sequence (or concomitance) as the only objective relation covered by causality (Even if it is said that there is now a further indirect relation between cause and effect of being believed to be regularly followed by it will be evident that the presence of this relation can make no difference to any of the objections I shall bring If being regularly followed by does not relate cause and effect adequately believed to be regularly followed by will not) Nor in my opinion does their account give anything that approximates to the ordinary connotation of cause even if they avoid disagreement with the common usage as regards denotation

² *The Mind and its Place in Nature* p 454

By the words causation is only regular sequence I mean the view that the only element in the popular notion of cause which is objectively true of the real world is the assertion of regular sequence

particular accounts of the other factors in it which course leaves open the possibility that there may be a great deal more in causation than regular sequence though nobody has yet succeeded in giving a satisfactory account of what it is. The other factor or factors may after all be unanalysable as some relations must be in any case and if this be so the criticism of alternative attempts to analyse them would be no argument whatever in favour of the regularity view. But even if causation be analysable we cannot assume that a particular analysis of it must be correct and exhaustive just because other analyses have partially failed especially when the analysis strikes us as very strange and quite different from what we thought we meant by causation. The history of philosophy shows that we are much more likely to err by accepting an analysis as complete when it is not really complete than by refusing to do so.

The main attraction of the regularity theory for me however lies in the fact that it seems not to admit more than the minimum necessary and therefore does not cumber itself with unproved assertions about causality. All it admits is regular sequence which seems to be a fact indisputably given in experience while all other views go very much beyond what can be certainly established empirically. Here however a dilemma awaits the advocate of the regularity theory. Is he to maintain regularity in the sense that any event which occurs once will always occur under the same conditions thus identifying causality with the Principle of the Uniformity of Nature or some similar principle? (The exact formulation of it will vary a great deal.) In that case he is himself going far beyond the evidence of experience and thus partially¹ sacrificing the chief advantage of his own as compared to other views for while he or anybody else has only experienced observed events he is now making an assertion about events that have not been observed. Or is he to interpret the principle as simply covering only the observed regularities of the past so that when anybody says that C is the cause of E the only part of his assertion which is to be accepted as giving the truth becomes the proposition that C has in all observed cases been regularly followed by E? In that case he must answer the question how induction and the sciences based on induction can be anything more than

¹ Not wholly because he is still committed to asserting *fewer* propositions about causality which go beyond experience than his opponents

an illusion. For induction imperatively requires some principles which go beyond what has been observed. This in the past has been regarded as one of the main objections to a philosophy of empiricism.

Recently however a somewhat novel attempt has been made by Mr Ramsey to escape between the horns of the dilemma.¹ He denies the need of justifying induction altogether and yet holds that it may be reasonable to be influenced in our beliefs by inductive evidence provided we distinguish between two different senses of reasonable. Beliefs based on induction conscious or unconscious are not reasonable he maintains in the sense of being logically provable or deducible from empirical premisses by any steps which logic could sanction but they are reasonable in the sense that it is a useful habit to form this kind of belief on the strength of past experience. By calling these habits useful he means that the opinions they lead to are for the most part true or more often true than those which alternative habits would lead to. He says that the fact established as he thinks by Hume that induction cannot be justified on logical grounds at all is no scandal to philosophy any more than it is a scandal that the evidence of memory cannot be logically proved.

Does Mr Ramsey really avoid the difficulty? In discussing this question I do not propose to deal with his highly ingenious theory of probability and his brief but equally suggestive account of general laws. Fortunately this is not necessary for my purpose. What I shall try to show is that he has not really succeeded in escaping the above mentioned dilemma. Reasonable is used by him to mean the outcome of a useful habit and useful to mean leading to opinions which are mostly true (or more often true than those which would have been reached otherwise).² But does he mean merely that the habit has led to these true opinions in the past or that it is likely to do so in the future also? That the habit of being influenced by inductive evidence has been useful in the past may have been proved empirically but this does not make it reasonable to continue to indulge it unless we assume on the strength of past experience that

¹ *The Foundations of Mathematics and Other Logical Essays* pp 197-8

² This definition of useful should in fairness to Mr Ramsey be noted carefully. It enables him to escape some of the objections to which the usual pragmatist solution of the difficulty seems open.

the habit will usually continue or at least is likely to continue to be useful. This assumption Mr Ramsey makes. He means to assert as his belief that a habit which has been useful in the past in leading to true opinions will really more often than not be useful in the future in this way not merely that it was useful in the past (or the outcome of a useful habit) to believe this. But in that case he is still involved in a dilemma. For he must admit either that he is holding a belief which has no claim whatever to be thought true even that of utility or that inductive evidence justifies an inference from past to future utility. He cannot escape by saying again that is justified merely means is useful to believe ¹ (i.e. liable to lead to truth) for he has no right to say that the habit of holding beliefs on the strength of inductive evidence is any more liable than any other course to lead to truth in the future unless he is prepared to admit that in some cases past utility in this way is an adequate ground for inferring at least the likelihood of future utility i.e. to make a categorical judgment about the future on the strength of inductive evidence. A similar argument would apply against anyone who tried to justify induction by its useful consequences in the past however he defined useful but the point against Mr Ramsey is not that he has failed to justify induction which he never tried to do but that he has declared that inductive conclusions are reasonable only in a sense which itself implies that if any inductive conclusions at all are reasonable in this sense at least one ² must be reasonable not only in this sense but also in another namely the sense in which it has usually been held by philosophers that inductive judgments are reasonable. The introduction of his secondary sense of reasonable has thus not provided a *via media* between genuine acceptance of inductive arguments and complete scepticism as to their validity.

Since the only alternative suggested has now broken down we must make our choice between refusing to accept any inductive evidence at all and admitting that to infer regularities in the future from regularities in the past is reason

¹ The belief may well also be useful besides being justified in my sense but he can have no possible right to assert that it is so unless he makes the admission in question.

² I.e. the judgment that what was useful in the past will (probably) be useful in the future.

able in a sense other than merely useful. Anyone who adopts the former alternative must hold e.g. that for anything we can tell it is no more likely that he will die shortly after eating a pound of arsenic than after eating a pound of bread or that it is no more reasonable to think that he will fall to the ground if he jumps out of a window in the top storey of his house than that he will fly. Such sceptical views have not been conclusively refuted by philosophers and if any reader accepts them I have nothing further to say to him but I at any rate am so prejudiced if it be a prejudice that I cannot do so and I suspect that most people are in this respect equally prejudiced. As a matter of fact Mr Ramsey himself seems really to hold that induction is valid in a sense other than useful (or the outcome of a habit which has been useful in leading to true opinions in the past). For he says that induction is one of the ultimate sources of knowledge just as memory is ¹ and though he is evidently not using the word knowledge in its strictest sense since he does not claim certainty for the results of induction the passage obviously implies that he supposes it to give us truth about the future as memory does about the past.

What he does attack is the view that induction depends for its validity on being justified by logic in the sense of being formally validated by universal *a priori* principles. Now he is undoubtedly right in holding that particular inductive arguments may be legitimately accepted as valid without such a justification and in holding that if we attempt a justification we fail hopelessly unless we assume principles which are neither deducible from formal logic nor capable of being established by observation. Again he may be right in emphasising the difference between induction and deduction more strongly than has usually been done in the past. But it does not necessarily follow that it is not incumbent on the logician to give a justification of inductive methods and that a philosophy which is incompatible with their being ever justifiable is not on that account open to the gravest objection. In induction we do not start by seeing the universal logical principles which hold in all cases and then base our specific arguments on these. On the contrary we may and do see the validity of particular inductive arguments without having thought of or being able to state the general logical principles which they exemplify. But

¹ *Foundations of Mathematics* etc p 197

deduction is after all situated similarly We can see the validity of particular syllogistic arguments perfectly well without knowing what a syllogism is or the general conditions under which syllogisms are valid but it still remains true that every valid syllogism is valid only by virtue of certain general principles which it is the aim of the logician to discover and formulate and I should have thought that the same was true of induction

Inductive arguments do not indeed require justification by the philosopher before they can be seen to be valid but they would not be valid if they were not capable of such a justification however difficult it may be in practice to find how to justify them Deduction and induction are in the same position in this respect I think except that in the case of induction we have been far less successful in determining what are the principles involved We need not wait with using syllogisms till they are justified by logic but all the same the particular syllogisms we use are only valid in virtue of general principles that fall within the field of logic and if a system of logic contradicted these general principles it would be at the same time implicitly denying the validity of all the syllogisms used by us This does not mean that we should be in danger of having to give up our syllogistic arguments as logically unsound we should rather have to abandon the system of philosophy which contradicted them and the same holds with induction Now if we are to avoid contradicting all our particular inductive arguments we must assume that we can pass from past to future regularities This cannot be a case of merely empirical knowledge for the simple reason that we have never observed the future but only the past yet if it is not sometimes justified all scientific predictions as to the future are totally groundless And the same applies to the passage from past events which have been observed by human beings to past events which have not Every scientific law involves such a passage It is not merely that the regularity view in the form in which it is confined to empirically established facts cannot justify induction (it has been alleged that all systems fail in this) but that it is incompatible with the very possibility of induction being valid at all

So we must in any case go beyond the empirical evidence and admit that we can sometimes reasonably infer with a considerable degree of probability that because a regularity

has occurred in the past it will occur in the future also¹ If we are to retain the regularity view of causation we must then understand it so as to cover not only the fact that regularities have occurred in the past but the justifiable anticipation that they will be repeated in the future under similar conditions C causes E (or the only part of this proposition which we are justified in believing) then becomes equivalent to something like C is always followed by E i.e. has been always followed by E in the past and will (or will probably) be so in the future This version of the view is generally held to constitute the only sense of causality in which causality is necessary for induction the other elements in the common notion of cause generally (though not if my subsequent argument is correct rightly) being considered superfluous for this purpose But the advantage of being reconcilable with induction is achieved only by sacrificing the chief attraction of the other form of the regularity view namely that it does not go beyond the empirical evidence Let us now turn to the positive arguments against the view

In the first place it is not generally realised that if the regularity view were the whole truth all practical life would become sheer nonsense For practical life presupposes that we can do things and are moved by motives and desires but it seems to me perfectly obvious that whatever is meant by these statements they cannot possibly mean merely what they could alone mean on any form of the regularity view

If causality meant regularity and if this were the only sense in which causality was true of the self in what sense could I possibly say that something occurred because I willed it or even just that I did something or that my motive for a certain action was so-and-so? To say that an action was willed or was done by me is certainly not merely to say that the action was of a type which follows most or all states of mind like my own at the time under conditions of the type before me or that my act can be analysed into a set of factors

¹ Mr Bertrand Russell (*Knowledge of the External World* p 226) maintains that the *a priori* principle necessary is induction not causality but what he means by the principle of induction seems reducible to the principle that the same event will happen under the same conditions which is identical with what is meant by causation on the regularity view (The interpretation Mr Russell gives of his principle (id p 225) is obviously not meant to be ultimate) When universalised the regularity view is thus equivalent to what has been usually called the Uniformity of Nature

each of which is always whenever it occurs preceded by some factor in the state which preceded my action on that occasion or to make either of these statements together with the further statement that most people believe this to be so or that I intend to use it to arrive at opinions about future events (as would have to be the case on Mr Braithwaite's and Mr Ramsey's theories respectively) To say that such and such an action is due e.g. to desire for power as a motive is more than to say that such actions generally are preceded by desire for power or to make any of the other statements mentioned in the last sentence It is to say that in this particular case it does not merely follow on but is determined by the desire in question It is not generally realised that the regularity theory would make all talk about motives senseless and that every time I speak of myself or anybody else doing anything I must imply causality in a sense other than regularity I am not arguing that we perceive causal connection immediately in these cases a proposition which is more doubtful but that whatever our ground for believing that will and motives cause action that belief which I like most people cannot reject and which does not *necessarily* presuppose *immediate* awareness of the connection does entail a view of causation different from the regularity view does entail causation in the sense not of regular sequence but of genuine intrinsic connection And that I am surely right in holding is a very strong argument against the regularity view from any standpoint save that of an epiphenomenalist or of a behaviourist If the regularity theory be true all practical wisdom which presupposes throughout that I can do things by willing them and can act from motives becomes worthless This does not strictly speaking disprove the regularity theory but the fact that a view inconsistent with it is presupposed in all practical action and all the psychology and ethics of practical action is if not a strict proof a sufficiently strong argument to make our conclusion highly probable

Memory itself I think presupposes causality in a sense other than any admitted by the regularity view If we are to be aware of the past in memory we must think of the past as determining or at least causally affecting our present state in remembering it if our state is not in any degree determined by the past event we have no genuine memory but a fancy or illusion (I do not mean that remembering an event is the *same* as having our present state determined by

the event or that the cognitive relation in question is a species of causality but at any rate it *involves* causality) Now that the past event I remember affects my present state obviously means more than that a similar state of mind always follows a similar past event or that both terms can be analysed into a number of elements of which this is true For it is not a statement about what usually happens but about a particular cognition in a particular self and it involves a real dependence of my state in remembering on that which is remembered by me So here again the regularity view proves totally inadequate

The whole foundation of Hume's scepticism is destroyed if it is once admitted that the fainter copy of an impression may be so connected with its original that in perceiving the copy we *eo ipso* know immediately not only this but the previous existence of the impression as the original of the copy For to admit this is to admit necessary connection in matters-of fact ¹

Thirdly if any beliefs due to inference are ever justified the regularity theory of causation is refuted for to say that the reason why I believe x was y implies among other things that a part cause of my belief in x was my belief in y ² in a sense in which it cannot be reduced to a proposition that all beliefs of the same kind as my belief in x follow in time or accompany beliefs of the same kind as my belief in y ³ or any other similar proposition If we do not admit this none of our beliefs supposed to be grounded on inference can be rational for in that case the intrinsic character of the reasons has nothing to do with our holding a belief to be true All that has happened is that we hold it to be true *after* having entertained these reasons for no other closer connection is admitted at all by the regularity view ⁴

¹ Stout *Mind and Matter* pp 218-19

² Note that the causal relation I assert is not between x and y themselves but between believing x and believing y Nor do I say that to infer x from y is the same as to believe x because I believed y only that the former is impossible without the latter

³ Nor can it be reduced to this plus the proposition that everybody does under certain conditions believe that a belief in x will always be followed by a belief in y or any proposition or propositions of this character

⁴ I do not mean that the relation between the premisses and conclusion in an inferred belief can be reduced to one of causation or defined in terms of causation Nor do I mean that the being partly caused by a belief in the premisses provides a differentia between

If there were no causal connection beyond regularity of sequence it is difficult to see how we could ever have arrived at the notion that there was anything more. To do so we should have had in Locke's phraseology to create a new simple idea. The advocate of the regularity view cannot reply that it is an illegitimate extension of a concept based on the experience of willing or as Hume holds on the experience of being necessarily determined by association to think in a certain way for if we do experience ourselves as determining and determined in this fashion we have already therein directly experienced causality. In the one case the experience is of ourselves as cause in the other case it is of a phase in ourselves as effect of something else either also in ourselves or external to us. Either the will really is causally active in which case there is some causation other than mere regularity or it is not in which case the illusion is still unexplained. We may give a similar answer to Hume's attempted explanation. For us to apply necessity as he holds through a confusion to the external world we must first have experienced it at least in ourselves passively if not actively and if so we have causality there at any rate in a sense other than regularity. To be conscious of ourselves as determined or constrained is not merely to be conscious of our state as succeeding certain events and to remember from experience that such a state regularly followed such events in the past and if it were only that Hume would not have explained the origin of the belief that causality is something more than regular sequence. If we were only conscious of causation in ourselves in the sense of regular sequence why should the experience of being determined to think in a certain way lead us to make the mistake as Hume considers it of applying causality in the fuller sense to the external world any more than does our experience of physical events and objects?

It may indeed for anything I have yet said be still true that causation prevails in the physical world in the sense merely of regularity, for the arguments from motives etc. memory and rational belief apply only to the self. But a particular pro-

true and false or reasonable and unreasonable beliefs. On the contrary it is a characteristic of all belief founded on inference. If I wrongly infer B from A belief in A is still a part cause of belief in B. Nor again do I mean to imply that in immediate apprehension of a timeless truth the truth is the *cause* in the sense in which an event might be of my apprehension.

position is sufficient to refute the contradictory universal. Further, if causation in the self involves something very different from mere regularity, the probability that this will be so too with causation in the external world is very much heightened.

Also if, as seems to be the case, we are immediately aware of ourselves as passive in perception or in facing obstacles to action, I should have thought that this must imply that we are at the same time immediately aware that something external¹ is acting or has acted causally on us in a sense which just as much as with our awareness of ourselves goes beyond mere sequence, however regular. Professor Whitehead has rightly, I think, insisted on the consciousness of the causal efficacy of physical objects acting on us as the primary or at least a primary factor in perception.

A further argument commonly employed is that causation is involved in the very notion of a physical object. The argument seems to me to be a strong one and, if valid at all, to prove causation in a sense other than regularity, for it seems to me clear that we cannot consistently think successive states as belonging to the same thing unless we think them as connected in some way like that demanded by the critics of the doctrine of external relations or at least in a way very different from any compatible with the regularity doctrine. It seems to me that whatever else their combination in one object involves, it must at least involve necessary connection. I do not agree with Mr. Braithwaite when he maintains in reply to an argument of this kind that the principle connecting into a unity the states of a substance may quite as well be a universal of fact as a universal of law.² For a principle that connects them into a unity must involve some objective relation between them beyond mere temporal sequence, but the regularity principle, which constitutes a universal of fact, gives no such relation. It merely adds to the assertion of temporal sequence the further assertion that what we call the effect always occurs in the relation of temporal sequence to the cause when what we call the cause is repeated. But this does not give us any new relation beyond temporal

¹ We need not be clear what that something is in order to have this awareness. We may be aware of our state as the effect of something, as constrained by something, without knowing what it is of which the state is the effect.

² *Mind* N S XXXVII no 145 p 70

sequence but merely asserts the regular occurrence of the relation of temporal sequence and this relation is clearly not enough for the purpose. It is not merely that the later states succeed the earlier and that in all similar conditions similar states succeed and would succeed on similar thus would give no intrinsic connection at all yet they could not be different states of the same thing without a very genuine and close connection.

It may be objected that the fact that they belong to one substance is sufficient to connect them but this will not hold for we cannot say that they are not intrinsically connected themselves but related merely by belonging to the same substance unless we are prepared to separate a substance from all its states and qualities a view which seems untenable and would now generally be rejected. Unless a substance and its successive states are to be completely separated the substance cannot retain its identity if its successive states and qualities are not intrinsically connected but merely follow according to uniform laws on each other. The qualities and states it would seem must be united together and grounded in the nature of the substance and that involves causality. We need not hold that substance is reducible to causality but we must I think hold that it implies the latter. And by similar arguments we can show the presence of causal connection in the self as a necessary prerequisite of its unity. Whether such an argument proves universal causality is more doubtful but it seems at least to prove some causality other than regularity.

But I shall not lay my main stress on this argument. There remain two more which to my mind conclusively disprove the regularity view not only of the self but of the physical world provided only we assume the validity of some of the ordinary inductive arguments used by natural science and if we do not assume this we have no right to accept as true the conclusions of science. I do not demand that philosophers should justify induction before they accept results reached by it in science but I demand that if they accept it in science they should not also accept views in philosophy which are totally inconsistent with the very possibility of its being valid. The arguments which I shall adduce also lead definitely to the conclusion that one of the relations included in the relation of causality is that of logical entailment. If good reason can be given for this conclusion we ought not to be deterred from admitting it by our inability to see the

logical connection involved in particular laws of nature or understand why a particular cause should entail its particular effect as we can understand why one side of a Euclidean triangle cannot be greater than the sum of the other two sides for C may perfectly well entail E without our being able to see that it does so and we may have general grounds for assuming the presence of a logical necessity which we cannot grasp ourselves or at least see that this assumption is really presupposed in all our scientific reasoning

Now in the first place if scientific arguments are to have any validity at all it must be possible to argue legitimately from cause to effect but no inference can possibly be legitimate unless the premisses really entail the conclusion And how a conclusion can be entailed by premisses in any sense which justifies us in inferring it from the premisses if it is *logically* independent of the premisses if it is *logically* quite possible that it should be otherwise is quite beyond my comprehension At least it is incumbent on anyone who dissents to give an alternative sense of entail according to which we shall be justified in inferring conclusions from premisses when there is no logical connection between them and I think I can safely defy him to do so Any comprehensible view of the relation between cause and effect that is compatible with the fact that we can infer one from the other must admit this logical connection Therefore if science is to have any claim to truth the cause must really involve necessitate the effect, not indeed as far as we can prove by this argument in any sense in which the effect cannot equally necessitate the cause but in a sense which is quite incompatible with the view that it is merely a case of regular temporal following True a premiss is a proposition or a set of propositions and a cause an event but how can there be a valid argument from a proposition or set of propositions to another proposition or set of propositions unless the content of the fact referred to in the one is really entailed by the content of the fact referred to in the other? If it is not the argument is simply a *non sequitur* This is overlooked in the case of causality because by the roundabout method of problematic induction i.e. by observing instances and concluding on the strength of them that there is a connection we are able to make the inference without seeing the connection an achievement which would be impossible in deduction of the ordinary type but though we cannot see such a connection we really covertly assume that there is

one whenever we make any causal inference whatever. How can we possibly be justified in deducing the effect from the cause unless we suppose that it is dependent on or follows necessarily *from* the cause and does not merely follow it? The relation of entailment present in causality is no doubt due to very different conditions from those which justify *a priori* inferences in pure mathematics and logic ¹ but entailment there must be if our inference is to be justified. We have no reason whatever for supposing that E will follow C in the future as well as in the past unless we suppose that the content of the two is so connected that C being what it is it *cannot* because of its intrinsic nature and not merely always does not occur without being followed by E.

The relation of causation shares with non causal logical entailment at least its most important feature namely that it justifies inference. This is the principal reason I imagine why the philosophers of an earlier age generally treated cause as a species of logical ground and this argument has in modern times as far as I can see been indeed overlooked but not refuted. Mr Ramsey would no doubt have said that we have only shown that it is reasonable in some sense to form such beliefs not that it is reasonable in the sense in which a logical conclusion is reasonable. But we have seen above ² that his attempt to distinguish two different senses of reasonable breaks down.

It does not indeed follow that the relation of causality is simply identical with or a species of the relation of logical entailment indeed this seems to me certainly false but it does follow that this is one of the relations which together make up the complex relation of causality. We need not and must not assume that causality is a perfectly simple relation and that the feature of it which is clearest to us must be the only import.

¹ The difference between entailment in logic or mathematics and the entailment involved in causation lies in the following circumstances on my view. (a) the general conditions governing and affecting it are very different in the two cases. (b) the terms connected by it are also very different in the two cases. (c) we cannot understand it or see its validity in the case of causality but only assume on the strength of inductive evidence that it holds between given characteristics. (d) though entailment is one relation present in causation it is certainly not the only relation present. It would be false to say e.g. that causation = a relation of entailment between events in time because entailment is not the only relation included in causation. What the other relations are I am not trying to decide.

² p. 157 ff

ant one though this seems to be a fallacy which most philosophers who have dealt with the subject have committed in one way or another

Let us now proceed to the second argument¹ Current accounts of scientific thought make great play with the notion of establishing a generalisation by showing the extreme improbability of the repeated occurrence of instances in accordance with it if the generalisation be not in fact true But if the regularity view be right all generalisations are nothing but sheer coincidences If there is a connection between cause C and effect E so that one really explains or entails and does not just in fact precede the other then the coincidence is indeed removed because there is now available a reason why E should always follow C but not otherwise On the regularity view there still just remains the brute fact that E always follows C and that by itself is just as improbable as if an unweighted penny showed heads every time it was tossed And indeed the strongest argument for the truth of inductively established laws is often or even perhaps usually —if the law in question or some law like it did not hold it would be extraordinarily improbable (one chance in many thousands or millions) that E should in all the observed instances have followed C therefore it is much the most likely alternative that the law (or some law like it) is true Now read for law fact that E always succeeds C and the argument becomes in the absence of any further conclusions the chance of E succeeding C in all say the hundred observed instances is one in many millions which would be a very improbable coincidence therefore we had better suppose that E not only succeeds C in these hundred cases but also in all the thousands or millions of unobserved cases (for that is all that a law now means) though this should according to the previous reasoning be millions of times more improbable still¹ The extraordinary unlikeliness of the generalisation cannot be removed unless we suppose a logical connection between C and E If a law stands for nothing but the mere fact that E always follows C to posit such a general law because it is fulfilled in many cases is only to increase the improbability and there can be no possibility of diminishing it unless to generalise by means of a causal law signifies something more than to assert an endless repetition of instances If C and E be logically connected so that the

¹ For this cf Professor Montague *Proceedings of the Seventh International Congress of Philosophy*, p 198 ff

one entails the other the coincidence disappears but otherwise how can it?

It might be objected that the notion of probability or improbability itself presupposes causation and that therefore an argument based on the improbability of a coincidence cannot be used as an argument for causation but (a) if it does presuppose causation in the fuller sense anybody who uses an argument from improbability or probability as all inductive logicians do has already presupposed this and *cadit quaestio* (b) if it only presupposes causation in the sense of regularity this is no objection to using an argument from improbability to prove that causation holds in another sense also (c) as Dr Keynes has shown probability and improbability are not notions which presuppose causation in any sense since they are applicable where causation does not occur e.g. to some propositions about numbers¹ or to the chances of a particular non causal argument establishing a given conclusion I have indeed assumed that the frequency view of probability is false and I can hardly afford the space to examine the arguments which to my mind render this view quite untenable² I will only say that if the frequency view be true the argument that a combination of events is highly improbable on any other ground than that such a combination has never or very rarely occurred in the past becomes nonsensical and therefore we could never support a hypothesis by arguing that otherwise a combination of events frequently observed would be very improbable But no modern logician who rejects causation in the older sense has constructed or could construct an inductive logic which dispenses with such arguments

To sum up then I do not claim to have disproved the regularity view but I do claim to have shown that to hold such a view is very unreasonable Nobody has indeed succeeded in defining altogether satisfactorily what else is involved in causation but it is no argument for accepting an unsatisfactory definition that nobody has given a satisfactory one and we cannot exclude the possibility that causation or some factors in it are unanalysable I reject the regularity view as

¹ E.g. it is very much less probable that all prime numbers between ten billion and eleven billion which have never been thought of by anybody should be one less than the square of some number than that at least one of them should

² V Keynes *A Treatise on Probability* ch 8

a complete account because it goes beyond the empirical evidence without going far enough either to reconcile itself with our intuitive convictions as to causality or to provide a basis for induction because it would really commit us to accepting a countless host of extraordinary coincidences the probability of which is of the order of one in millions because it is irreconcilable with any account of the self which admits willed action or motives and so with the assumptions of our whole moral and practical life because its denial is implied in the conception of physical objects and of the self alike and indeed in all rational action and belief. The view only seems tolerable because men have not the leisure each time they use the word cause to think out what it means afresh and therefore are apt to forget the way in which they have defined it so that while they may accept the regularity view when they reflect on the matter abstractly they unconsciously still use the term cause on other occasions as if a contrary view were true. And if the regularity view were true the fact that causation has ever been thought to involve the features mentioned other than regularity would be totally inexplicable.

What positive account can we now give of the nature of causation? What characteristics can we ascribe to it? In the first place though we have rejected the regularity view as a complete account of causation we may accept it gratefully as a partial account and affirm that causality involves among other things uniform sequence. But every one of the objections to the regularity view given above shows the presence also of something which is extremely hard to define but may be roughly indicated by the words *intrinsic* or *inherent connection*. Others may perhaps think this in different ways but such a connection I can only think at all definitely by thinking cause and effect as connected by a relation of logical entailment ¹ i.e. as internally related in the tenth sense of this term ¹. That we must admit this relation of entailment between them if we are to accept the most universally admitted inductive inferences of science seems to be definitely proved by the last two arguments in particular. This justifies the acceptance of the first two of the four features of causation mentioned ² as implied in the common sense view (if they can indeed be separated, which

¹ I.e. so related that one is logically dependent for its existence on the other and that it would be logically impossible for the one to be what it is without the other existing also.

² V above p 154

I doubt) i.e. (1) intrinsic connection (2) logical entailment and the second point at least carries with it the fourth necessity. It is an additional objection to the regularity view that it is impossible to identify *could not be otherwise* with *always is*. Those who find it depressing to think that the future is logically entailed by the past must remember that it is equally true that the past is logically entailed by the future. In this respect the relation of causation is symmetrical since the cause can be inferred from the effect as well as the effect from the cause, though in other respects as I point out in the next paragraph it may not be so.

The third feature commonly known in philosophical circles as *activity* presents greater difficulties but it is fortunately not necessary to discuss it here. The chief reason for assuming its presence is that it seems obvious that the cause produces or determines the effect in a sense in which the effect cannot be said to produce or determine the cause but I know neither of any proof of this apparently obvious proposition nor of any satisfactory analysis of *activity*. But that may be because the proposition is self-evident and the concept unanalysable indeed I am rather inclined to think that this is so. But in any case while logical entailment is a part it is not the whole of causation. This we can see quite clearly though what the other factors are may be very obscure. But whatever be the whole truth about causation it is sufficient for the argument of this book to have shown that logical entailment is present between cause and effect. We must now return to this important point and explain it somewhat further since it is one which seems repugnant to the present generation.

The view that causation involves logical entailment has often been stated in a radically wrong way. It is often said that the effect must be contained in the cause or that there must be identity between cause and effect. These statements taken strictly are preposterous. The effect cannot be contained in the cause for otherwise all causation would be simultaneous and it cannot be identical with the cause in the proper sense of the word for otherwise it would not be a different event. Both views would do away with change and so with causation itself. Even if it were true that the effect consists merely of a redistribution in space of the same entities as are present in the cause and that causation does not involve a change in their qualities a conception which played an enormous part in the development of the mechan-

istic view of the universe¹ the second distribution would still not be properly speaking either contained in or identical with the first. There is something present that was not present before namely a new arrangement of the same things and contained in becomes only a metaphor. If there is a logical connection between cause and effect it must still be a synthetic and not an analytic connection. If we assume all logical connection to be merely analytic Hume's argument certainly holds against the view that causality has any kinship with such a connection.

That causality involves a relation of logical entailment between cause and effect is proved I have contended by the fact that we can argue from the cause to the effect which presupposes that the former entails the latter though we cannot understand the connection. This view is not inconsistent with the well warranted principle that existence can not be proved *a priori*. What was true *a priori* would still be not a categorical but a hypothetical proposition not that a certain effect (E) exists but that *if* a certain cause (C) exists a certain effect (E) must do so or *vice versa*. At the same time it is necessary to insist that when we have said that the cause logically entails the effect we have not given a complete account of causation this being both beyond the scope of the present book and beyond the author's capacity. Causation includes but is not reducible to a relation of logical entailment.

Even so my view of causation is flagrantly inconsistent with certain widely held theories of inference. If logical relations can only hold between propositions and not between facts in the real world or if all inferences are merely analytic or if inference and logic have merely to do with symbols and not with the realities to which the symbols refer then it will be impossible to suppose that a logical connection between cause and effect could ever be perceived by any mind even by Omniscience itself. But I feel bound on general grounds unconnected with causation to reject the

¹ Thus the idea that the cause should make the effect logically intelligible by leading men to assume wherever possible that it was like the effect has played a large part in the development even of physical science (Cf the insistence of scientists till the last few years at any rate, that change must be continuous and the arguments used against the interaction of body and mind). Personally however I do not hold that logical entailment need involve likeness.

did not occur in fact without the other Thinkers and scientists looked for causes because they wished to *explain* events and if they had seriously held from the beginning the views of causation which most realist philosophers hold to day half the inspiration of the scientific search for causes would have been missing and induction would never have been trusted at all It is the opposite view the type of view I am defending which has led scientists to seek for causes under the impression that the discovery of them would make the world more intelligible¹ and to suppose that their findings had universal validity though based on particular observations and experiments Hence almost all philosophers prior to Hume held that there was an intelligible logical connection between facts in the physical world despite their inability to discern its nature

Further it seems to me that in the psychological though not in the physical sphere we do have faint glimmerings of such a *a priori* insight² It seems to me that we can see and to some extent really understand why an insult should tend to give rise to anger why love should lead to grief if the object of one's love die or prove thoroughly unworthy why a success should give pleasure why the anticipation of physical pain should arouse fear It does seem more reasonable on *other than inductive*³ grounds to suppose that if A loves

¹ An enormous part has been played in scientific as well as philosophical controversy by the assumption that the real cause must be like the effect This is evidently an inference though not necessarily a correct inference from the view that the cause explains and implies the effect It was felt that causation by what is like is more intelligible than causation by the unlike This assumption cannot be explained as the result of experience because in the causal connections with which we are most familiar in experience cause and effect are often most unlike Can there be anything much more unlike than an act of will and a movement in my body than a vibrating piston and the noise it makes than a physical wound and a sensation of pain than a coloured image and certain wave-lengths than water and hydrogen and oxygen together just before their combination into water² There is no conjunction of events which we have experienced more frequently than that of a physical event and a feeling yet this seems of them all the least and not the most intelligible (It may be objected that the instances mentioned never constitute the *whole* cause but then experience never gives us that at all)

² On this subject v also Stout *Studies in Philosophy and Psychology* p 77 Shand *Foundations of Character* p 19 Kohler *Gestaltpsychologie* Eng. ed p 268 ff

³ I mean by induction here as elsewhere in this chapter non intuitive or as Mr Johnson calls it problematic induction

B that will tend to make him sorry when B dies than to suppose that it will make him intensely glad or that to be told he has done something exceedingly well will be pleasant rather than unpleasant to A when he thinks that the remark is made by a man qualified to judge and is really meant. It may indeed happen that by the time B dies A will have gone mad and will actually rejoice in the occurrence or that owing to some violent quarrel the love will have changed to hate. It is again possible that A may school himself actually to rejoice in being abused as a part of his moral training or as an opportunity for the exercise of patience and even that he may carry this to such a morbid extreme as actually to regret his own successes but what we see if we see any thing is not that love *must* lead to grief or that success *must* give pleasure but that there is a causal tendency for it to do so which will operate unless prevented by other circumstances but which *may* be counteracted. If A loves B there is a tendency at least for him to feel grief at B's death. Nor do I suppose that men perceived this general principle to be true in advance of experience as with all general principles we first apprehend it in particular instances in our experience and then by a kind of *intuitive* induction reach the general principle. I do not suggest that such a principle is self-evident in the degree in which the fundamental principles of logic are but I am convinced on general grounds that we must admit different degrees of self-evidence.¹ In this case our insight is lacking in certainty and clearness but it may be present for all that. We may be in a position in regard to some of the general laws of psychology analogous to that in which an unintelligent schoolboy who is just beginning to comprehend the proofs of the most elementary theorems stands in regard to geometry. He does not yet fully grasp the points involved his notions are obscure and confused but yet he is in a higher position than if he had a total and absolute lack of insight. Our power of insight is not marked enough to help us much in reaching conclusions as to laws which have therefore to be based on problematic induction but in some cases we seem to be able to see a certain intelligibility if not necessity in the law discovered that we do not see in any causal laws of the physical sciences. At any rate anybody who denies altogether the insight for which I am contending will have to hold that

¹ V below ch V sect. 5 *ad fin*

it is just as reasonable to think of love as causing intense joy at the death of the person loved except that this does not happen in fact and it is certainly difficult to accept such a view

The instance in which this insight has been most commonly asserted is a less defensible one. It has been asserted in the case of the connection between volition and physical movement but in that case it has to meet the objection that what is called the effect here is connected with the cause by many intermediate steps involved in the physiological apparatus for controlling our movements and that of the intermediate steps we have apart from the empirical evidence of the physiologist not the remotest idea¹. But if we substitute for physical movement the thought willed and confine ourselves to the voluntary control of mental not of bodily processes our position is less open to attack. The argument that the effect does not follow in all cases i.e. that we sometimes fail to control our thoughts as well as our bodies may be met if we hold that what we are aware of is not that the act of will is a sufficient cause but that there is a causal tendency in virtue of which it will *per se* make the effect in question more likely though it may be counteracted by other causes. We may note in this connection that the other instances of apparent insight I have given are instances connected with certain conative tendencies.

My argument is not overthrown by the possibility that there may exist somewhere non human minds of a quite different psychological 'make up' in whom these laws do not operate. For what we perceive if anything is not the absolute necessity of these laws but their intelligibility within the system constituted by human nature as we know it² and consequently great deviations from this nature would

¹ I do not think the objection sufficient to refute the view completely if it is held that what we see is only a causal *tendency* but combined with the utter unintelligibility in general of the connection between mind and body it seems sufficient to me to make the view unreasonable.

² To control one's thoughts for long by an effort of will is extremely difficult but to turn one's attention *momentarily* to a subject as a result of a volitional act is perhaps not beyond the capacity of the weakest of us. The difficulty lies in keeping our attention fixed on it.

³ I agree with the coherence theory that the real ground of at least most inferences is the system within which they are made as a whole.

negative the connection. Further the connection perceived is as I have said at the most only a causal tendency and not a law in virtue of which an effect inevitably follows.

It may be objected that there only appears to be a connection of the kind in question because we do not call a sentiment love unless it involves a tendency to feel grief at the loss of its object or call an event a success unless it is liable to give pleasure. But this cannot be the explanation for the characteristics of tending to arouse grief at the loss of its object and tending to arouse pleasure are certainly not the only characteristics of love and of success respectively. It is therefore not a merely verbal judgment that these characteristics tend to accompany the other characteristics of love and success. If it were we could not say that A loved B till we knew that he had lost or thought he had lost B and that he felt grief in consequence.

The apparent intelligibility cannot be explained by repeated experience since we have experienced many physical connections still more frequently without their seeming intelligible. If we hold to the traditional conception of what a *a priori* insight is we must deny that we have any sort of a *a priori* insight here for we do not know the truth and see the logical necessity of any causal laws in advance of experience but if we admit what I contend elsewhere¹ that some degree of a *a priori* insight may occur without certainty and without yielding definite clear cut judgments then it does seem that such a *a priori* insight occurs in the case of causal laws governing the human mind but not in the case of causal laws governing the action of matter. It was because too much was expected of the *a priori* that the slight degree of a *a priori* insight we do possess in psychology passed unheeded. What insight we have does not enable us to prove causal laws in advance of all experience but it may well be at work helping in the decision between two different hypotheses whether in theoretical psychology or in practical life. I doubt whether the decision that one hypothesis is more likely than another because it is more in line with a particular man's character or human nature in general can be explained entirely by previous experience without some further insight into the connections involved and this insight *may* be one of the features that distinguish the good from the bad psychologist. Anybody who denies such insight altogether should at least

¹ Ch. V sect. 5 *ad fin*

explain why it is that the connection between love and grief at the death of the person loved success and joy pain and fear praise and self satisfaction seems natural and intrinsically suitable in a way in which the even more frequently experienced connection between different physical events does not

If it be true that we can have even glimmerings of an *a priori* connection in the case of the mind the fact that we do not have them in the case of matter need not trouble us for we have at the most only a skeleton knowledge of the real nature of matter¹ and therefore it would be strange indeed if we could see an *a priori* connection there. But this is not the case with mind since we have immediate experience of one mind our own

It may be objected that while if A genuinely entails B A cannot ever be a fact without B also being so the causal connection mentioned as holding between e.g. love and grief does not hold in all cases and that I have therefore by speaking of causal tendencies only concealed an insuperable gulf between causal connection and logical entailment. To this I should reply (i) that it is still *universally* true both (a) that the love of a person makes the occurrence of grief at his death *more probable* than would otherwise be the case and (b) that *other things being equal* the person who loves him would always feel the grief. Where he does not this is due to other counteracting factors. (ii) I think that our premisses, as in at least many cases of non causal logical entailment are not just one or two isolated circumstances but these circumstances in conjunction with our rough idea of the system within which the inference takes place here our general idea of the man's nature or of human nature in general. But the imperfections in our idea of the system adequately explain any uncertainty. Grief does not follow from love of B + B's death taken alone but from these within a causal system and since our knowledge of the system is very imperfect there are always unknown factors to make the inference uncertain. The whole cause would universally entail absolutely necessitate the effect but we never know the cause as a whole. There is nothing surprising in a failure to reach conclusions which hold universally if we only know

¹ The primary qualities which are the only ones generally recognised as causally effective obviously cannot constitute the inner nature of material objects

part of the premisses required to establish them and yet a knowledge of even part of the premisses may sometimes give us some rough indication of the conclusions which would be really established by fuller knowledge or result in certain laws based on a generalisation from experience seeming intelligible and natural to us in a way in which others do not.

I have not assumed in all this that causation is universal though in another book I have argued in favour of that view¹. For even if it is not universal it is obvious that it does play at least a part in determining every event we know in the physical realm and that any mind in which causality played no part would be unthinkable to us for it would be a mind that never acted from any motive whatever. Consequently if I be right in my contentions as to the nature of causality we cannot in any case reasonably refuse to the universe as far as known by us the title of a real system though unless causality be completely universal it would like many other systems not completely determine all its members.

The question whether causality is universal or not is one which belongs quite definitely to the domain of philosophy. Any attempt to settle it by means of a special science is as much an encroachment as it would be for a philosopher to try to settle particular points in a science by metaphysical arguments. Such encroachments must be resisted whether they be in favour of determinism as they were till quite recently or whether they be in favour of indeterminism as they usually are now. Empirical evidence cannot possibly establish either alternative. We cannot argue that because a great many events have been successfully ascribed to causes by science therefore all events must have causes. The proportion of events of which science ever claimed to have found the causes has always been very small compared to the total number of events and the causes even of these have only been found by assuming *a priori* some principle of causality. Nor can we argue that because science has failed to discover the causes of some important class of events therefore they have no cause. Science can only reach its results by mathematics, observation and causal inference and since universal causality obviously cannot be disproved mathematically, or by observation, as we cannot observe the absence

¹ *Kant's Treatment of Causality* ch. IV. For an attempt to reconcile this with human freedom, v. id. pp. 215-22.

of causes a scientific disproof would have to run like this. Some events can be best explained ¹ causally if we deny that they have any causes—an argument which is obviously not of a very cogent character. For the philosopher to refuse to regard scientific evidence as relevant here is not to tamper with science but to refuse to allow the scientist illegitimately to tamper with philosophy. But this is not to deny all philosophical importance to recent discoveries. It may well be the case—though I do not profess the scientific knowledge to form a judgment as to whether it is so—that these discoveries mark the final breakdown of the whole way in which thinkers of the last three centuries have viewed physical causality. But it is obviously to put it mildly far too early to say that because one type of causal explanation has failed therefore none is possible at all ².

That mechanical causality is a category inadequate to reality is a discovery anticipated by the despised idealists themselves. They did not indeed foretell that any such discoveries would be made within science itself but they did emphatically maintain that whatever its scientific value the conception of mechanical causality was ultimately inadequate and untrue and this very view of theirs they held as a deduction from the doctrine that reality is a thoroughly unified whole the doctrine which it is now so widely assumed has been refuted just because the prophecies based on it seem to have come true. It may be that the conception of mechanical causality fails us not because the universe is too little of a system but because it is too much of an interconnected system for a view which uses only one narrow set of characteristics (primary qualities) in its causal explanations to be true. It may be simply that the universe is too much of a unity for such drastic abstractions completely and ultimately to succeed. Or, if again some readers attach their preference to the suggestion that the movements of electrons cannot be determined by general laws but vary according to the individuality or spontaneity of the different electrons themselves this need only mean that they find their cause

¹ Even if causally explained as used in the Pockwickian sense in which it is generally used by upholders of the regularity type of view.

² The view that recent scientific discoveries establish indeterminism is strongly condemned by Einstein himself and by M. Planck in *Where is Science Going?*

in the differing internal character of the different electrons not that they have no cause at all

But whether causality is universal or not it seems clear that realist and pluralist critics have not paid sufficient attention to the fact that there is at least one all pervasive relation which makes a difference to its terms in a very real sense and is sufficient to give to the world a unity closer than any that could be given by mere juxtaposition. For even if I should have gone much too far in my contentions about logical entailment and causality it is at any rate perfectly clear that causality is internal

- (a) in the sixth sense i.e. it follows from the nature of its terms in some sense of follow other than that of regular sequence
- (b) in the seventh sense i.e. it could not have been absent (in some sense of could not distinct from never is) without at least one of its terms being different
- (c) in the ninth sense i.e. neither could the cause have existed without the effect following nor the effect have existed without being preceded by the cause

If we accept universal causation we are thus driven to the conclusion that everything in the physical universe is internally related in the sixth seventh and ninth senses not indeed to everything else if by that is meant all other events in the universe as separate events but to the whole as a causal system. For of any particular event it would then be true (a) that it and its relation to the system follows from this system (b) that none of its relations to the system could be different since what it is and what relations it has are completely fixed by causality and (c) that it is absolutely dependent on the system for its existence

To contend as I have contended that causality involves a relation of logical entailment between cause and effect and effect and cause is to contend that it is also internal in the tenth¹ sense and that it would be so in the eighth² sense for a being who possessed the requisite insight if not for the human mind. This would assimilate the whole universe to

¹ I.e. such that the nature of one term is *logically* dependent on that of the other i.e. the events which constitute the cause could not exist and be what they are if it did not produce the effect and the effect could not exist and be what it is if it had not been produced by the cause

² I.e. cause and effect are so related that determinate characteristics of the one could be deduced *a priori* from the other

a logical system though we must indeed remember that the universe is also a great deal more than a logical system

Besides being internal itself in these senses the relation of causality is a generator of internal relations i.e. wherever C causes E characteristics of C other than the characteristic of being cause of E (namely the characteristics between which the causal relation in question holds¹) are internally related in the senses in question to E or characteristics of E

Further that there are causal relations between all parts of the physical universe is though not indeed proved with certainty yet a conclusion which no reasonable man can reject While the *a priori* proofs of universal interaction (reciprocity) given by Kant do not seem to me satisfactory and I know no other satisfactory *a priori* proof of this universal interaction when applied to physical objects is at any rate a well grounded scientific generalisation if only because light waves travel from every part of space to every other and so between all physical objects Even if everything is not completely determined causally everything physical we know seems in some way to be causally interconnected² It is indeed conceivable that there might be another physical world out of range of and completely unaffected by and unaffecteding ours but of such a world we could know nothing for to know it we should have to be in some way affected by it It sounds absurd to say that there is a causal connection between my writing this book and the Prime Minister of Australia's breakfast but it is clear that the physical paper on which I write is causally affected by the surrounding atmosphere e.g. as regards temperature this in turn is affected by the state of the ground immediately beneath (if it were converted into an active volcano I should cease to write and in any case the temperature of the ground affects

¹ It seems to me in the main a verbal question whether causality is said to be a relation between things (continuants) or between characteristics of things If we define it as primarily a relation between two characteristics then two continuants are causally related — they have characteristics which are in the primary sense causally related If we define it as primarily a relation between continuants then characteristic A causally determines characteristic B = any continuant which possesses characteristic A will cause the presence of characteristic B in some continuant (either itself or some other)

² This fact is mentioned by Kant himself as an empirical confirmation of his proof

³ There is ultimately some direct or indirect causal connection between all finites (Alexander *Space Time and Destiny* vol II p 152)

the temperature of the air and so in some degree that of the paper) the ground immediately beneath is in turn affected causally by the earth below it and so on right through the centre of the world to Australia while there is clearly a causal connection between the state of the ground in Australia and the quality of the pigs corn etc which go to make the breakfast in question

It is not true indeed that my writing this book is a part cause of the statesman having his breakfast or *vice versa*. One of the reasons why views such as the coherence theory and the internal theory of relations seem impossible to many thinkers is because they are thought to involve absurd statements of this kind but it is obvious that two events can be causally connected without one being a cause direct or indirect of the other. Two events are also causally connected if both are effects of the same cause or even only if their causes though different are themselves causally connected in some way direct or indirect. Unless we frankly take the sceptic's position and abandon causality altogether we can always interpolate between two events on or in this planet a series of causes and effects so that they are causally connected in an indirect way and if we admit any sort of causal connection between *any* events on the Earth and the other planets and fixed stars this will itself extend this very indirect causal connection to *all* events on the planets and stars. According to Sir James Jeans science has made it practically certain that every body pulls every other towards it no matter how distant it may be. Newton's apple not only exerted its pull on the earth but on every star in the sky and the motion of every star was affected by its fall. We cannot move a finger without disturbing all the stars.¹ True the causal connection may be of no practical or theoretical importance in determining most specific events but the mere fact that it exists may be of great philosophical importance however insignificant its actual effects.

Nor would this conclusion be overthrown by the now fashionable indeterminism though it would be somewhat limited in its significance. Even if indeterminism be accepted the arguments I have given would still hold for the causal connections I have mentioned cannot be totally denied without altogether breaking with science. Even if everything is not completely determined causally it is still clear that

¹ *The Stars in their Courses* p 74

causality has a great part to play. The universe would still be a causal system in that everything was causally connected though it would not be a system which completely in all respects determined its members. This is no unusual feature in a system: a system of professional grading e.g. determines its members not in all but only in some respects. Indeed since a concrete thing has most varied qualities this is the case with most systems at any rate in which existent objects fall. (The case is different when the terms of the system are abstract such as numbers in a mathematical series.)

I have so far spoken only of the physical world and we cannot disprove the possibility that there may be things which are neither physical nor mental or that there may be disembodied spirits and that such beings may have no causal connection with our world whatever. But of such beings we could know nothing¹ and whatever view we take of the relation between body and mind it seems clear that all embodied minds at any rate are through their bodies bound up with and dependent for their existence at least in their present form on the physical system. If the relation between body and mind is causal this follows directly from our previous argument and the only alternative to making it causal is to substitute some other relation which would have to be equally internal in character. Nothing that I have said is intended to imply that the physical is necessarily the only or prior part of reality. For all we know and for anything I have intentionally implied to the contrary it may be but a small part of a much wider system or it may derive its systematic character from values which transcend it or from the purpose of a God.

There is a real sense and importance then in saying that the whole known universe is a system constituted by an internal relation which connects each thing to the rest of the system though it does not follow that it is such a closely knit logical system as the Hegelians are commonly supposed by their opponents to have held it to be. Causality in general

¹ We may note that believers in God commonly regard God as being the cause of the world or at least as having some relation to the world analogous to causality while the belief that human beings exist in some future life as disembodied spirits itself involves a causal connection between this life and the subsequent life and so between these beings in their later state and this world we know.

I indeed look upon as the application to events of the principle of coherence or system which is a cardinal assumption of thought whether this principle be conceived as a pragmatic postulate verified by success or as a necessity of logic or as a somewhat dim and confused but nevertheless genuine intuition of the nature of the real world

§ IV CONCLUSIONS

We have thus as a result of our consideration of causality reached the conclusion that the world known by us constitutes a system in which every particular is linked to the rest of the system by a relation of logical entailment. The presence of this relation is obviously incompatible with the extremest forms of pluralism. It implies that the nature of any one thing taken by itself is incomplete and internally incoherent without the whole system on which it depends. Things by their very essence belong together. But it does not imply that reality has as high a degree of unity as is present in one substance or one mind. Nor does it imply that all relations are internal in the last four senses of the term: some of them are clearly not. Our conclusion is based not on the consideration of the nature of relations as such but on the consideration of one particular type of relation: causality. At least all this will follow if causality is held to be universal and I must admit that I cannot really think anything as happening without causes sufficient to account for it¹. If causality is not universal the world will indeed still be a system though a less rigorous one since at the very least causality plays an enormous part in it and in some degree directly or indirectly links all particulars.

It does not follow that every particular event or thing is

¹ I.e. I regard the proposition expressed by saying that every change is caused not as certain but as *prima facie* self-evident and so to be accepted unless it can be shown to be inconsistent with propositions possessing a greater degree of *prima facie* self-evidence or coherence or both. (E.g. if it could be shown to be inconsistent with the very possibility of ethics it might still be justifiable to reject it as being less certain than many propositions of ethics. I should insist that there are different degrees of self-evidence.) I cannot agree with what seems to be Professor Broad's interpretation of the *prima facie* self-evident proposition expressed by saying every change is caused as being simply that it has a necessary as opposed to a sufficient cause (*Examination of McTaggart's Philosophy* p. 238 ff.)

in these senses internally related to every other ¹ For instance we need not hold that the flower in the crannied wall is dependent on the planet Mars for its existence only that it is so dependent on something or other in the universe Neither are we bound to hold that the true account of its qualitative nature entails all true propositions about Mars so that with sufficient insight we could infer them from knowledge of its nature But it is by no means unreasonable to hold that its nature could not be understood adequately without bringing in the physical system as a whole That this is so is the most elementary scientific fact the flower's growth is dependent on laws of physics such as the law of gravitation and on conditions of temperature which depend on the constitution of the whole solar system yet the same physical laws and the same physical system are just the factors which have led to the existence of Mars as a planet and to its present state The point is not that any one thing could be inferred direct from any other but that the nature of no one thing could be understood without reference to the world system as a whole and that this same world system determines the development of every other particular at least in its general lines Nor does it follow that all relations are internal Some it seems clear might be different while their terms remained the same because even if they must be determined by something they need not be determined wholly by the nature of their terms and therefore they might be different without the latter being so provided only something else in the universe were different from what it in fact is

There are two further points about relations which go far to modify any thoroughly pluralistic view In the first place we must remember that experience never gives us relations and terms but a continuum from which relations and terms are abstractions We must not assume that this continuum can be reduced to a set of terms in relation indeed I think it true to say not merely that we do not experience it as such but that we apprehend that it is not such that it cannot be thus exhaustively reduced by analysis to terms and relations This I mentioned as the element of truth in Bradley's polemic

¹ I have urged above (p. 134) that everything is related to every thing else in the seventh sense but it is obvious that all things are not internally related to each other in the ninth and tenth senses of the term, though everything may well be internally related in these senses to everything else taken together

against relations¹ It is I think perfectly true and a very important point that if not all relations at any rate all relations of which we know between concrete things or states of things (in opposition to relations between universals of which this is not true) occur in and presuppose a continuum² This is true of spatial relations it is true of all relations which occur in time it is certainly true of all relations within the experience of a living mind it must be true of any relations between qualities of actual existents because the qualities always qualify things (substances) which cannot themselves be reduced to a set of qualities in relation It is not true of relations between abstract numbers or between logical principles but these numbers and principles are already abstractions that do not exist by themselves

With concrete things then the idealists are right when they insist that relations between terms can only occur within a wider unity connecting the terms This view is I think also true in the case of universals but there the wider unity is not a continuum It is a relational system by which I mean a set of relations arranged in a determinate order³ under a given determinable⁴ such that some *a priori* inferences are possible within the system I am inclined to think that it can be shown that all relations between universals fall within some such system or other however this is of no particular relevance for our argument here

Secondly the advocates of external relations seem to assume too readily that a hard and fast line can be drawn between the

¹ V above p 149

² What is meant by continuum is I trust conveyed to some extent at least by my examples I cannot venture on a definition What I am giving is not intended to be a metaphysics which would require such a definition but a series of suggestions that ought to be taken into account by metaphysics But my conception of continuum at least involves the negative characteristic of being something which cannot itself be reduced to a set of terms in relation Note that I only said that any relation presupposes some continuum not that each relation presupposes a different continuum Thus it is not legitimate to object that the terms must be themselves related to the continuum within which they fall as part to whole and therefore require a further continuum and so on *ad infinitum* They do not need any other continuum beyond the original one

³ I mean that they are in this order objectively The use of the word arranged is not intended to suggest that they have been put in this order by mind by any process or act of arranging

⁴ It seems obvious that the distinction between determinate and determinable applies to relations as well as qualities

intrinsic nature of a thing and its external relations. None of them have ever as far as I know attempted to work out the distinction in detail and give a systematic account determining which kinds of relations are external and which not nor have they decided what qualities (if any) are separable from relations. They assume in their philosophy that every thing has a qualitative nature of its own to which its relations are logically indifferent so that it would be logically if not causally possible for it to exist without them. Quite apart from any arguments based on the nature of causality such as those I have used above is this not a bold assumption which seems to disagree at any rate with the character of the qualities we know though it may for all we can tell be true of qualities of which we have no idea whatever? Would any qualities of the kind we know be left if we took away all the relations of anything? Consider first the so called primary qualities of matter. Is the position of a thing logically separable from its spatial relations to other things or its shape thinkable apart from the relations which the parts of its surface bear to each other and to the objects which bound it? Motion velocity mass are in a similar position. I am not sure that I ought not to go further and say that all these so called primary qualities are reducible to relational characteristics but even if this is too much to say it is certainly true that they are unthinkable apart from relations. Size and number are left but these are not characteristics which can possibly constitute any part of a thing's qualitative nature. To know the size of an object is to know the space it occupies or the plurality of its spatial parts but not to know anything about what it is that occupies the space or what its parts are like and as for number it is clear that to say there are e.g. four things is not to say anything about the qualities of the things if it is to say something about their relational characteristics. The only other characteristics of physical objects recognised by science resolve themselves into causal properties which are admittedly relational characteristics and not qualities. No doubt if we admit the physical reality of secondary qualities we have characteristics which are neither relational themselves nor bound up with relational characteristics in the same sense as are primary qualities but the advocates of external relations certainly do not usually hold that the inner nature of matter is constituted by its colour noisiness taste, smoothness or hardness etc.

If we turn to psychological characteristics we find that the ones we know are again all unthinkable apart from certain specific relations. With the exception of mere sensation or feeling they are all attitudes to something or awarenesses of something or dispositions which realise themselves only in such attitudes and awarenesses. This is a commonplace of psychology. They all imply objects and so relations to objects. In fact from one point of view an attitude may reasonably be said to be just a relation to an object¹ though from another its qualitative aspect it is a definite experience of the person who has it. (I am not sure indeed that we might not say that in an important sense it is at the same time both a quality and a relation.) And similarly with an awareness or any cognitive state. Feeling may seem an exception as I have said but feeling as sensing² is at any rate relative to the *sensum*³ and feeling as pleasure or displeasure is always pleasure or displeasure at something. It always I think logically entails something at which we are pleased or the reverse if only a *sensum*⁴. In connection with all this a doubt is indeed raised by the fact that a man may feel an emotion or assume a cognitive attitude towards an imaginary object which does not really exist e.g. he may believe in Zeus or feel amusement at Pickwick. But it is very doubtful whether such cases can be treated without *either* admitting subsistent entities as the objects of his attitude *or* analysing attitudes to imaginary objects in terms of relations to existent objects or to universals realised in existent objects and either course would make the attitude ultimately relative to real entities of some sort. And in any case it would be very rash to say that it is logically possible for any mind of the type we know to be a mind at all if it has not at least *sensa* of which to be aware and an environment of some sort with which to stand

¹ Apart from the organic sensations that accompany it which come under the heading of feeling.

² Sensing is often classed as belonging to the cognitive side of our nature but it seems to me much better to class it as belonging to the affective side though it is usually or perhaps always accompanied by some cognition (v. Aaron *The Nature of Knowing* p. 19 ff.) Perception on the other hand is unmistakably a species of cognition.

³ Or if *sensa* are denied to the physical objects directly perceived by or appearing to us.

⁴ In its other uses the ambiguous word feeling I think stands for either an attitude or an awareness and is therefore covered by what I have said already.

in relation That a self implies a not self is a principle of philosophy not lightly to be set aside especially by realists

What does all this prove? I admit that I am none too clear but one thing seems certain namely that it raises very serious difficulties for any philosophy which reduces the world to relations and terms with a nature of their own logically independent of relation No such philosophy can be accepted till the difficulties have been squarely faced and conquered The point is not merely that everything of which we know has some relations that are internal in the seventh sense i e such that if the relation were not present both of its terms could not be what they are This must be admitted in any case since everything is e g similar to something else and similarity is such a relation Nor is it merely that granted more than one existent in space or time it is logically impossible for anything to exist in space or time without standing in some relation to other existents which again must be admitted It is that all the characteristics we attribute to minds and in science to physical objects seem to be either themselves relational or logically dependent on there being a specific kind of relation between the object to which we attribute them and some other object without which relation the characteristic is unthinkable i e such objects or at least all their characteristics of which we know are internally related in the tenth sense This is not to say that they are logically dependent on any particular object but that they are dependent on their being some object or other thus related to them I could not be pleased without being pleased at something but my pleasure is not thereby shown to be logically dependent on the particular circumstance about which I am pleased at any given time ¹

As a matter of fact it seems to me that the entities for whose independence of relations the best case can be made out are *sensa* Here if anywhere do we find an internal nature separate from relations But the philosophers who have tried to work out an account of perception have rarely held that *sensa* were separate entities at all but have usually come to the conclusion either that they were unthinkable apart from a consciousness which sensed them or that they were qualities of physical objects, or that they were constituted by the mere

¹ It is however admittedly causally dependent on it and therefore that it is logically dependent on it *among other conditions* follows if what we have said about causality be right though it could not follow from the present argument

appearing of qualities which did not really qualify anything and so they could hardly stand in this proud position of independence according to most views. In any case unless he comes to the conclusion both that we are justified in believing in physical objects in a realist sense and that these objects are best regarded as groups of *sensa* a philosopher can have no ground for asserting the existence of *sensa* except as perceived by a mind and even if he adopts the views mentioned he has no ground for asserting their existence except in two kinds of closely interrelated groups (a) physical objects (b) sense fields of a percipient or supposing that they could exist in their present form outside such groups. The most he could say is that (a) their dependence on these groups may be merely causal not logical in so far as he distinguishes these two modes of dependence (b) there is a bare possibility so far as we know that *sensa* may also exist apart from any such special group though there can be no evidence to show that they do so exist or even that it is logically conceivable that they could do so.

At any rate it seems very doubtful whether it is possible to hold the pluralistic view of the world as a set of separate things with natures of their own apart from their relations and it is certain that philosophers have no right to assume the view without a more effective defence of it against the above objections than has yet been given. On the other hand some idealists have altogether overshot the mark in claiming that *all* relations were internal in some of the senses in which they did claim it and have created a great deal of confusion by using the term without clear distinction in so many different senses. The advocates of external relations were therefore right in most of their criticisms of the arguments of their opponents but did not face the three strongest arguments the argument from causality the argument that relations presuppose a continuum and the one based on the difficulty of finding qualities separable from relations. Further I should agree with almost everything they have said if it is applied only to some and not to all the relations of a thing. There is nothing inconsistent in holding both that most of the relations of a thing are external in the last four senses and that some of them must be internal. Even if the nature of a thing does depend on its relations this need not prevent some of its relations being quite indifferent to it because its nature is dependent on other relations. Finally it seems clear that everything is not internally related to

everything else taken separately in at least the last three senses of the word (the eighth ninth and tenth) though the argument from causality seems to show that it is so related to everything else taken together

The view of the world as consisting of separate terms connected only by relations indifferent to the nature of these terms which is the main object of Bradley's attack is in any case quite untenable though I do not venture to affirm that this is the metaphysics really accepted by most advocates of external relations. Some relations at any rate are not indifferent otherwise any logical or causal connection would be impossible and it is not even clear whether things can be said to have a nature of their own apart from relations. The view is also refuted by the previous argument that all relations presuppose a continuum which is not itself reducible to a set of terms and relations. How far the conclusions we have reached go in establishing the coherence view we shall see in the next chapter

CHAPTER V

THE COHERENCE THEORY

§ I THE OBJECTIONS TO THE CORRESPONDENCE THEORY

WE now pass on to the so-called coherence theory. The connection of this doctrine with idealism is well known. Coherence is held to constitute

- (a) a definition of truth or at least an account of its nature
- (b) an account of the nature of reality
- (c) a criterion of truth

But since it might well be the case that the theory is tenable in one of these senses without being tenable in the others we had better treat them separately. As an account of the nature of truth the coherence theory usually starts from a criticism of the correspondence theory. I shall therefore begin by discussing the current objections to this correspondence view so commonly accepted in one form or another by realists and apparently at least assumed by the plain man in his ordinary thought about objects. This however need not detain us very long for the view can easily be restated in a form which escapes the objections in question. It may indeed be doubted whether the theory as thus restated should be called the correspondence theory but at any rate it will certainly not be the coherence theory and will provide a genuine alternative to the latter compatible with realism.

According to most realists as well as to the plain man a judgment is true when it corresponds to an independent reality and false when it does not and this is either a definition of truth or expresses at least an essential characteristic of truth. The advocates of the coherence theory object in the first place that no tenable account can be given of this correspondence for whether it is regarded as copying or as similarity in structure or as one to one correspondence on very serious difficulties. It seems clear however that such criticism cannot be final.

for the reason why all accounts of it involve great difficulties may be simply that the relation is unique and unanalysable. In that case we need not be troubled by our failure to give an account of it in terms of other relations because it is simply not identical in character with any other relation or combination of relations. Our failure to define it may be simply due to the fact that it is intrinsically such as neither to require nor to admit of a definition.¹ If any relation be unanalysable as some obviously must be if we are to escape a vicious infinite regress such a fundamental relation as the one between a true judgment and its object is as likely to be so as any and it seems to be radically different from any other relation of which I can think. We need not object indeed to the attempt to give a further account of it and I am not trying to show that the attempt must fail but we certainly need not deny the presence of such a relation if and because it does fail. I cannot imagine any possible way in which it could be proved that if there is such a relation it must be other than unique and simple except by a successful reduction of it to a relation or relations found elsewhere but the objections which I have mentioned can only disprove the correspondence theory if it is first shown *both* that the relation *must* be thus reducible and that it has not been reduced successfully.

Secondly it is objected that there are no entities which can stand in such a relation as correspondence to reality when we make a true judgment. Truth has often been defined as the correspondence of our ideas with fact or reality but there is no psychological warrant for the assumption of any entities ideas as distinct from (a) images (b) thoughts i.e. acts of thinking or judging and neither of these will serve the purpose of corresponding. Often the only images we have in thinking are words but these cannot be regarded as the entities in whose correspondence to reality truth consists. It is not

¹ I understand by a definition of something either its reduction to a combination of two or more other entities (whether two relations two qualities or a relation and a quality or a quality and a species of continuant etc.) or a definition *per genus et differentiam* not the giving of a mark or property which always accompanies and can be used to distinguish but is not identical with what is defined. E.g. if the copying theory were correct truth would be definable as the relation of copying (genus) when this holds between a judgment and its object (differentia) or the property in a judgment of standing in this relation. In this sense of definition a unique and unanalysable relation obviously cannot be defined.

the acts of judging or thinking which are held to be true nor is it the words. It is not judgments in the sense of acts of judging but in the sense of what is judged in the acts of judging and what is meant by the words. Hence arises the view that truth consists in the correspondence of propositions to reality these being conceived as non psychological non physical entities which have being but not existence and are independent of being judged. But such a view of propositions has been severely criticised. We need not however dwell on the objections to it for it need not necessarily be involved in the correspondence theory any more than the view that correspondence consists in copying. It is difficult definitely to disprove the view that propositions have being as separate entities but at any rate the assumption is one which should be avoided unless facts really compel us to make it. It is however not necessary to the correspondence theory since we may take the position that what corresponds is neither propositions as separate entities nor the acts of judging as a whole but that factor in the acts of judging which though it has no separate being we treat separately by abstraction when we speak of propositions. For even if propositions are not separate entities we must admit that they can be treated as if they were separate for many purposes. For example in logic we can say a great deal about them and even in ordinary life and in science we constantly describe them as true or false meaning not merely that so and so has on a particular occasion judged truly or falsely but that such and such a proposition is true or false whoever judges it. We are speaking of a proposition on most occasions when we make use of a that clause in ordinary language. The term is technical but that for which it stands is as common as daylight. Now all this need not necessarily imply that propositions really are entities separate from the act of judging but it must imply at the least that they stand for real elements in the act of judging which can be abstracted and treated as if they were separate. But if so what corresponds to reality thus constituting truth may be this something whatever it is for which admittedly they stand. It need not be treated as having separate being by an advocate of the correspondence theory unless it can be shown by other arguments independent of this theory that it has separate being in which case any theory and not only the correspondence theory would have to accept the conclusion.

The third objection to the correspondence theory is that we

could not tell whether our judgments¹ did correspond to facts or not unless either the facts to which they corresponded were themselves judgments or we knew directly the facts and not merely judgments or propositions about them. The former alternative is accepted by idealists the latter by many realists e.g. Cook Wilson. Either may be declared to be incompatible with the correspondence theory the former on the ground that it was an essential feature of this theory that the facts to which true judgments corresponded should not be themselves judgments but realities independent of a judging mind the latter on the ground that there will then be at any rate some true judgments of which the correspondence theory will not hold namely the judgments that other true judgments correspond to reality. It is further urged that knowledge cannot be reduced to awareness of a kind of transcription of reality it must be an awareness of something real or of nothing at all. If we did not have some direct knowledge of reality however scanty from the beginning we could never come to know anything.

Such objections are valid against some forms of the correspondence theory. They refute for instance a representative theory of knowledge (which must be distinguished from a representative theory of perception²) and they refute the view that correspondence is the criterion of truth. We can not test the truth of a judgment by seeing whether it corresponds to facts without so to speak translating these facts into other judgments. Facts can only be reached through cognitive processes and therefore the results of a cognitive process can only be tested by other such processes. What we call testing by reference to facts is really testing by reference to more elementary cognitions. Sensation as mere feeling must give rise to judgment before it can be used as a test³. But correspondence might well constitute the nature of truth⁴ without constituting its criterion and there is a form of the theory which still escapes criticism as we shall see shortly.

¹ In order provisionally to cover in my account of correspondence both the view which admits propositions as separate entities and the view which does not I have used the ambiguous term judgment which may stand either for my judging or for what I judge.

² V below ch VI sect 2.

³ The same objection may be brought against the attempt to make the universal criterion of truth verification by experience.

⁴ It is usually in this sense only that the theory is put forward by its advocates.

Fourthly the correspondence theory is rejected on general grounds because incompatible with the idealist position as founded on arguments which are treated elsewhere in this book and therefore do not need to be discussed here e.g. when it is asserted that there are no merely given facts but that all facts clearly show the work of mind in truth making.¹ We may mention however Bradley's assertion that truth must be identical with reality. He bases this on the argument that if there were a difference between them and this difference were not contained in the truth the truth would be so far not the truth because defective.² His view is that truth is not indeed absolutely identical with reality as a whole in all its aspects but is one complete aspect of reality. This aspect seeks to be and in a sense implicitly is the whole but like any one aspect of reality cannot fulfil its nature without self contradiction since to fulfil it would be to bring in also all the other aspects and thus cease to be mere truth. For to supplement the nature of truth by the other aspects of reality is to modify it.

Now if truth means what is known or what facts are for cognition in so far as cognition is successful and reality means the facts *per se* the view that truth and reality are identical may well be accepted. In so far as we know what we know is identical with reality or it would not be knowledge.³ But it is not what is known as real fact that is true in the strict sense but judgments about the facts and there is still surely a distinction between judging both in cases of knowledge and opinion and the facts about which we judge. Knowledge is ambiguous for it may mean both what is known and the knowing of it and while in the former sense it would include all the reality known in the latter sense it does not include and is not even partially identical with what is known. Bradley insists that the boundaries of an object can never be rigidly fixed and that its nature should be taken as including all its relations and all its effects so that the fact of being known and even the knowing of it by a particular mind would be part of the nature of the substance or continuant known but the object of knowledge i.e. of a given cognition is never strictly speaking a substance or continuant as a whole but certain facts about it.

¹ E.g. Bradley *Essays on Truth and Reality* p. 108 ² Id. p. 113

³ When I objected to the tendency to make identity the ideal of knowledge I meant not identity between *what is known* and the real facts but identity between these latter and our minds as *knowing* them.

and these facts we may reply cannot include the fact that they are known ¹ though the nature of something which they qualify may do so if we take this extended view of a thing's nature.

Besides as Bradley admits he cannot destroy the relation on which the correspondence theory rests. Truth to be true must be true of something and this something itself is not truth. This obvious view I endorse ². All he can do is to interpret the view differently. For him the relation does not hold between a factor in our knowing as a particular mental event or a timeless proposition and a real fact but between a one-sided aspect of reality and reality as a whole the latter being the harmonious all-embracing experience and the former this experience as it shows itself in one aspect thought. But we may correctly say that even on his view truth corresponds to reality inasmuch as every element in the whole is supposed to be expressed though inadequately in the truth aspect. He holds indeed that the internal development of the truth would by inherent logical necessity if carried to its conclusion involve complete identity with reality and at that final stage it would not correspond because it would be identical with reality. But then neither would it be any longer truth according to him therefore truth might still always correspond to reality. Further Bradley quite definitely admits correspondence as constituting relative truth in the case of our judgments while adding that none of our judgments are wholly true and that the notion of correspondence would not be applicable to what was wholly true. Owing to the internally self-contradictory character possessed by the ideal of truth as by all ideals short of the whole what was wholly true would on his view be more than and therefore inconsistent with truth but it would seem to follow that all truths since they are partial ³ must correspond in so far as they are true. We may further note that correspondence is not treated as indefinable by Bradley but as reducible to the possession by truth of a character such as logically to imply the complete reality of which the truth is a partial manifestation ⁴.

¹ The fact that they are known may be made the object of a second cognition but not of the one by which they actually are known.

² *Essays on Truth and Reality* p. 325.

³ I shall shortly criticise his doctrine of degrees of truth. If this doctrine is rejected the admission that *our truths* correspond is an admission that truth does for this can no longer be attributed to their falling short of the character of truth.

⁴ I am condensing and paraphrasing Bradley's actual words.

but we have not committed ourselves to any particular view as to the nature of the correspondence relation. That Bradley takes the view of it he does depends on his general metaphysics rather than on any specific objections to a realist theory of correspondence.

This illustrates the impossibility of dispensing with the relation described perhaps very inadequately as correspondence if we are to give any account of truth that applies to the truths known by us. The strength of the correspondence theory lies in the fact that a judgment is at once different from and yet dependent for its correctness on the object judged about. Whatever metaphysical view we adopt as to the ultimate nature of knowledge and reality we are forced to admit this fact either openly and consciously or implicitly and unconsciously. Our judgment does not make nor is it identical with the physical fact, the past state of mind, the events in human history, the law of nature, the mathematical or logical principle about which we judge, yet whether the judgment is or is not true is determined by its conformity to or discrepancy with the character of that about which we judge. If a judgment bears a certain relation to its object it is true; if not it is false, and since this relation requires a name it has been called correspondence. The coherence theory, since it describes truth as the coherence of judgments, does not do justice to the fact in question. It tends to ignore the facts that any judgment must refer to something and that a true judgment must be true of something other than itself, that is, while its adherents may admit so much in words, if pressed they define truth in a way which would be quite compatible with a judgment being true and yet true of nothing whatever, for there is no mention of anything but judgments in the definition, and judgments cannot be true merely of other judgments.

Let us then try to restate the correspondence theory in a form which will escape the objections brought against it. In the first place it will be safest to give up any attempt to explain what correspondence is in terms of any other relation, and simply to treat the relation between a true judgment and its object as unique and unanalysable, at least till a satisfactory analysis has been found for it. We know what it is like at least partially¹ in particular cases, because we know what

¹ Its unanalysable character need not prevent it having more than one characteristic, provided it is not reducible without remainder to other relations or relations and qualities.

is meant by holding true beliefs concerning some particular fact but we are not committed to the view that it can be analysed or still less to any particular analysis of it. In order to give a satisfactory account of truth we must exclude any notion of likeness or copying. Nor need we assume any sort of one-to-one correlation between different elements in a judgment and different facts in reality. Otherwise we are exposed to the objection that judgments must be treated as a whole in determining their meaning.

Secondly while the admission of propositions as separate entities should be avoided if possible it can only be avoided by an alternative account of what it is that we really discuss under this heading. We might for instance make propositions features of or elements in the act of judging inseparable from the latter. The proposition S is P might be described as that which is common to the different mental events which come under the heads of judging that S is P denying that S is P doubting that S is P considering whether S is P etc. but which is not common to the mental events of judging that S is P and judging that S is Q . What corresponds to reality would be then neither the judging as a whole nor a proposition as a separate entity but a certain factor in the act of judging. False judgments would be judgments in which nothing stood in that relation to any fact outside the judgment. This view would avoid a well known difficulty about error for the object of an erroneous judgment would then not be anything real by itself as it would have to be on most other views but would only have being as an inseparable element in something else namely the mental event of judging. Thus if X judged that the earth is flat there would not therefore be a real proposition that the earth is flat. What would be real would be only the complex mental event X judging it to be flat. The chief difficulty which I can see in the view is that a proposition e.g. that S is P ¹ cannot be said to characterise a mental event in the way in which a quality or a relational characteristic characterises anything. Propositions cannot be brought I think under the heading of qualities states events or relations. That is why in stating the view I had to use the vague words, element and factor. However that is only to say that the cognitive situation is quite unique in character.

¹ By using this symbolism for convenience sake to represent any proposition I do not mean to imply the view that all propositions are reducible to the subject-predicate form.

Another very interesting alternative is suggested by Professor Stout¹. According to his view possibilities and probabilities have objective being as well as actual facts and in error the object of our mind is an unactualised but still objective possibility. This avoids the necessity of admitting propositions either as separate entities or even as factors in the act of judging but it is interesting to see that even on this view there is left some relation such as that which advocates of the correspondence theory try to describe though Professor Stout would himself I think not use the word correspondence in connection with his own theory. For while it is no longer the case that there is a relation of correspondence between the proposition that S is P and the fact S-P since the first term of the supposed relation has no being on this view either as a separate entity or even as a factor in the act of judging the distinction between true and false judgments is still constituted by a kind of correspondence between our judging and reality. For a true judgment on this view consists in the adoption towards a possibility of an attitude of belief or affirmation in cases where the possibility really is actualised or an attitude of disbelief or denial in cases where a contradictory of it is actualised that is in a correspondence between our judgment and reality in respect of affirmation or denial. We have with profit travelled far from the correspondence theory as usually described at least by its opponents but we have not eliminated the relation to which that doctrine owes its plausibility.²

The third objection to the correspondence theory was to the effect that it cut us off from the direct awareness of reality which is necessary if we are to tell even whether our judgments correspond to reality. As I said it is valid against some forms of the theory but it does not alter the fact that the correctness of our judging depends on a special relation to the fact judged.

¹ *Studies in Philosophy and Psychology*, pp. 304-6.

² The ingenious theory on the subject of propositions put forward by Mr. Ryle (*Proc. of Aristot. Soc.* 1929-30 p. 91 ff.) has excited considerable interest but I think I may claim exemption from the necessity of discussing it as it is hardly a theory that would be held by advocates of the coherence view and it would on the contrary if correct turn the edge of their objections to the correspondence theory by suggesting another alternative in its place besides coherence. As far as I can see Mr. Ryle gives no substantial argument to support his theory except the objections to the view that propositions are separate entities but I have mentioned two other ways of avoiding that alternative which in my opinion are preferable for several reasons.

about which relation need not be incompatible with our being also directly aware of the fact related to our judging by it. It is true that when we know we know real facts not merely ideas or propositions but there is no difficulty in reconciling this with the other circumstance emphasised by the correspondence theory namely that when we do know anything there is a special relation between the fact known and a certain factor in our cognitive process which relation differentiates the latter from error. Whatever else it is knowing must involve bringing our minds *into accordance with* reality and this is also the case with right opinion. It is thus that the correspondence theory rightly emphasises as the essential purpose of cognition.

It is often supposed in this connection that the correspondence theory is involved in a fatal dilemma. Either we have no direct awareness of reality in which case we cannot be aware even that what we judge ever corresponds or we have a direct awareness of reality in which case the correspondence theory breaks down with some truths at any rate namely the truths revealed by that direct awareness. But this argument presupposes that there is no relation of correspondence in cases where we have direct awareness which is not true. The fact that I am directly aware of a fact at the time of judging does not prevent but is likely rather to ensure my judgment's corresponding to (being in accordance with) the fact about which I judge. We must not indeed suppose and this is perhaps how the misunderstanding originated that the judging and the direct awareness of the real which tells us that the judgment corresponds are separate acts and that the second would have to be performed afterwards to test the first. On the contrary to judge is in the case of a true and justified¹ judgment to see and in the case of a false or unjustified judgment to think we see that what we judge corresponds to real facts. If the correspondence theory be right to know that something is true is just to know that it corresponds and so its truth need assuredly not be tested again by so to speak looking at reality to see whether it does correspond. If truth really is correspondence the recognised methods of obtaining truths will all be methods enabling us to see what judgments correspond to reality. These methods involve at every stage

¹ I add justified because otherwise it might be objected that we sometimes make true judgments on wrong grounds or as a result of mere guesswork.

a direct cognition of reality and need neither to be replaced nor to be supplemented by a direct awareness radically different from them telling us whether their results correspond

All successful cognition is in an important sense direct even when based on inference. For it is the real fact about which our judgments claim to be that we are cognising and not merely propositions or something else in our mind corresponding to it. At least this is the only sense that I can understand in which it can reasonably be maintained that even all certain knowledge is direct.¹ But whatever views we hold on this question they need not prevent us from accepting the correspondence theory now that we have seen that correspondence and direct awareness are compatible. All judgment is at the same time awareness of the real in so far as it is true and justified and we do not need therefore any further direct awareness to supplement these judgments because we already have it in the act of judging itself. It is sometimes suggested that there is a propositional factor only in cases of opinion not in cases of *knowledge* since while in opinion we are not in knowledge we are directly aware of the fact or law cognised and therefore do not need a proposition as a kind of substitute for it. But (a) if there is no propositional factor what can be said to be true in cases of knowledge? Certainly neither our direct awareness as a whole nor the real known to us. So the paradoxical conclusion would follow that in cases of knowledge the knower knows nothing which is true. We must therefore suppose that there is a propositional factor present in knowledge too which propositional factor we can in a sense be said to know though in a sense different from that in which we can be said to know the reality to which it corresponds. (b) It seems to me that knowledge and belief shade off gradually into each other in a way which makes it impossible to maintain quite different epistemological theories for the two. (c) As I have urged direct awareness is not incompatible with a relation of correspondence nor is the propositional factor a substitute which we cognise instead of cognising the real. On the contrary to know the truth of the propositional factor (in one sense of know) is the same as (in another sense of know) to know the real to which it corresponds. (d) We are discussing the nature of truth here not that of knowledge and it is surely quite clear that truth in one very important sense of the word

¹ V below p 265 ff

the sense under discussion does not stand for either identity with or direct awareness of the real concerning which the truth holds but for a relation of something else to this whatever that something is or a characteristic depending on the relation in question and it seems to me that while the relation is unique correspondence is a tolerably appropriate name when once divested of misleading associations with copying

As regards the fourth set of objections they are founded on general idealist arguments which I have discussed earlier If some of the epistemological theories criticised in Chapter II are accepted it is clear that the correspondence theory falls but as we have rightly or wrongly come to the conclusion that these theories must go this need not trouble us now And the correspondence theory is confirmed by the fact that no idealist can give an account which makes the slightest sense of our ordinary judgments without admitting a relation of this kind as at least a relative truth Since we have not found the arguments for an Absolute knowledge of a different kind from ours convincing we are excused from discussing whether it would be applicable also to this absolute truth And unless we accept Bradley's doctrine of degrees of truth we must admit that the correspondence theory since it is true of our truths at any rate holds not only of relative and partial truths but of truths which as far as they go are absolutely true though not the whole truth

The objection that the correspondence theory involves an infinite regress is not I think valid It is the case that if all true judgments correspond to reality the judgment that this is so will also correspond and so on *ad infinitum* but this is no objection unless it can be shown that we could not legitimately make the first judgment without first making the whole infinite series It only shows what in any case is true and can be shown in various other ways namely that an infinite number of potential judgments are true The judgment that the judgment that the judgment that the judgment that all true judgments correspond to reality corresponds itself to reality¹ is a judgment which is tedious useless and uninteresting but then a

¹ It may be maintained that this is really no different from the first judgment that all true judgments correspond to reality and that the apparent infinite regress consists only of a set of different possible ways of expressing one and the same judgment I am not sure whether this is right or not, if it is right, the objection in any case falls to the ground

great many true judgments e.g. judgments about the shape and size of each grain of sand on the seashore are tedious, useless and uninteresting. This is a reason why we should not waste our time making them but no reason why we should refuse to admit a theory which implies their truth though it fortunately does not oblige us to repeat them. Besides the objection, if valid, would apply to any universal proposition about true judgments whatever. Not only does a similar infinite regress arise with any rival theory such as the coherence view but even if we content ourselves with simply denying the correspondence theory we have the very same regress except that each judgment is negative instead of positive and reduced even if we take the alternative of maintaining that it is meaningless. For the statement that all true statements correspond has no meaning is itself a statement and so we have the statement that the statement that all true statements correspond itself corresponds has no meaning¹ and so on *ad infinitum*.

On the other hand we ought in thinking of the relation between judgments and their object to rid ourselves of any notion of copying or likeness or one-to-one correlation and not to make the judgments with which we deal into a screen shutting us from reality or a kind of photograph serving as a substitute for reality. And since in the minds of many these notions are inextricably associated with the correspondence theory it would be better perhaps to have recourse to a new name and call the view we have outlined the accordance theory of truth. I doubt whether the theory is very different from what the more important advocates of the correspondence theory have meant but it is certainly very different from what their opponents thought they meant. And there comes a time in philosophical controversy when the meaning of a word has become so obscured by acquired associations and ambiguities that it is a real service to the interests of truth to make a clear cut of the name altogether. The word accordance has several advantages over correspondence. It will not like correspondence seem to imply a set of discrete entities in the judging mind like or parallel to a corresponding set in the

¹ If a statement really has no meaning it is presumably a mere set of words or marks on paper and does not express a judgment at all but the assertion that it has no meaning must then itself have meaning and be a judgment. Consequently it is not possible to reply that the sentences in inverted commas do not express any real judgment.

real world and it makes it easier to state the theory in terms of our mental acts of judging and not in terms of propositions. We can say our judging accords with reality but if we use the term corresponds we have to say that what corresponds to reality is not our judging but our judgments an ambiguous and misleading word. A person who was most reluctant to admit a relation of correspondence might be quite ready to admit that our judging when true was in accord with reality and that it was this which constituted its truth.

§ II DEGREES OF TRUTH

Besides being a theory as to the nature of truth the coherence view is also a theory as to the nature of reality and the criterion of truth. As an account of the nature of reality it takes the form that everything that is is included in a thoroughly coherent system and this view is *prima facie* at least compatible with the denial both that truth is best defined in terms of coherence and that for us coherence is the only or main criterion of truth. But it is commonly held both by supporters and opponents that this view as to the nature of reality has an important corollary in regard to the account of truth which I shall proceed to discuss next both because it gives rise to some of the principal objections brought against the coherence doctrine as an account of the nature of reality and because it is more closely connected with the subjects just discussed. I am referring to the famous doctrine of degrees of truth. The next subject for discussion after this will be the coherence theory as an account of the nature of reality and finally I shall say something about it as an account of the criterion of truth.

What I have called the doctrine of degrees of truth may be summarised as the doctrine that all judgments¹ are both partly true and partly false. This doctrine seems flag-

¹ Bradley persistently uses the word judgment without making clear what he means by it and especially whether he means judging as a mental act or attitude or what is judged (as many philosophers would say 'the proposition judged') and as a matter of fact his doctrine of degrees of truth seems to refer to both senses of the word. I suppose he would maintain that they were inseparable. I shall say something later about the relevance of the distinction but in giving an account of his views I am for the present bound to repeat the word judgment without making the distinction because he fails to do so himself.

rantly to contradict the law of excluded middle¹ according to which the only alternatives are absolute truth or absolute falsehood so that a judgment can only be partially true or partially false in the sense that it is analysable into several judgments some of which are absolutely true and others absolutely false. It seems also quite incompatible with the self-evident certainty which we see to attach to many judgments. Surely it is certain that the propositions—nothing can be both black and not black in the same sense of black in the same respect and at the same time. I see a black patch now. If Socrates is a man and all men are mortal, Socrates is mortal—are not only partially but completely true. Surely it is utter nonsense to say that $2 + 2$ equals 4 is partly false or that $2 + 2$ equals 5 is partly true. And again it is objected that if all judgments really are partly false this will apply to the judgment that they are so and to any judgments fixing their relative degree of truth and error and that if we have no certainty and no absolute truth anywhere even partial truth will be impossible for us.

Bradley however is on his guard against such objections. At any rate he repeatedly and expressly recognises the absolute and certain character of some judgments and has quite definitely formulated a way of reconciling this with his own view.

If you ask me for instance whether there is truth in the statement that $2 + 2 = 5$ I answer that I believe this to be sheer error. The world of mathematics that is I understand to rest upon certain conditions and under these conditions there is within mathematics pure truth and utter error. It is only when you pass beyond a special science and it is only when you ask whether the very conditions of that science are absolutely true and real that you are forced to reject this absolute view. The same thing holds once more with regard to matters of fact. Obviously the construction in space and time which I call my real world must be used and obviously within limits this construction must be taken as the only world which exists. And so far as we assume this we of course can have at once simple error and mere truth. Thus the doctrine which I advocate contains and subordinates what we have called the absolute view and in short justifies it relatively.²

¹ Bradley *Logic* I p 163 n admits that on his view the law of excluded middle is not true absolutely but only in a relative and limited sense. It does not according to him have the same degree of truth as the law of non-contradiction.

² *Essays on Truth and Reality* pp 266-7 cf p 276

Bradley emphatically defends not only the absolute truth but the certainty of the law of non contradiction and with greater daring proceeds to ascribe absolute truth and even certainty to his own fundamental metaphysical views¹ With regard to the main character of the Absolute he holds that his conclusion is certain and that to doubt it logically is impossible² For outside our main result there is nothing except the wholly unmeaning or else something which on scrutiny is seen really not to fall outside He says that he agrees with his realist and pluralist opponents in refusing to admit that every truth can be consistently allowed to be merely relative and says that he cannot take the opposite of Realism and Pluralism to be less than absolute truth when so far as I can see in each case the supposed contrary of my view is as such really nothing³

In order to reconcile this admission of absolute truth in one sense with his doctrine that in another sense no truths are absolute he has recourse to two methods Firstly he maintains in regard to some truths e.g. the law of non contradiction, that they are absolutely true in the sense of not being corrigible *intellectually* though corrigible otherwise by the introduction of the sides of experience⁴ other than thought That is they cannot be refuted or amended as long as we remain within the sphere of thought we know with certainty that it can never be right to contradict one of these judgments by another judgment To suggest any alternative inconsistent with them is not to suggest anything thinkable it is simply meaningless This view is taken by Bradley of the fundamental principles of metaphysics—the coherence doctrine the doctrine of degrees of truth and the doctrine that there is nothing in reality but experience These escape the uncertainty and error which infect all finite truths because we know that all possible new truths are included in them We do not know how the principle of coherence will be realised in detail but we do know that any truth that we may find will be coherent and we do know according to Bradley, that it will conform to the principle of degrees of truth and that it will be a truth directly

¹ *Appearance and Reality* pp 512 ff 536-7

² *Id.* p 518

³ *Logic* II pp 681-2 (Terminal Essay added in 2nd edition)

⁴ We must remember that according to Bradley there is nothing real but experience

or indirectly applying to experience. Finite truths are limited by the conditions under which they are asserted e.g. by the system of the science to which they belong but these absolute truths are unlimited and unconditioned by other truths since they are seen to be true of everything¹.

But though they attain the highest level attainable by thought as regards truth even these judgments do not completely fulfil the ideal of thought and truth because they are still inadequate to the nature of reality. They deal and can only deal in terms of abstractions and abstractions do not do justice to the nature of the individual real. Reality is more than a ballet of bloodless categories. Truth aims at nothing less than identity with reality and this is our right and essential aim in knowledge for we seek to know reality as it is yet it is an aim that can never be fulfilled. This falling short by truth of its own ideal Bradley expresses by saying that no judgment is ever wholly true. Other thinkers would prefer to say that a judgment might be true but must always be incomplete or inadequate but Bradley refuses to separate the truth and the adequacy or completeness of a judgment.

But whether he has expressed it in the best way or not it is difficult to doubt that there is this essential inadequacy in thought. The end of thought namely complete knowledge could not be attained by any number of judgments however true. For even if it is held as I think rightly that the object of knowledge is not to attain any kind of identity between the knowing self and the reality known it can hardly be denied that in successful cognition *what we know*² must be identical with the reality known and that to have complete knowledge of anything would be to know it in all respects as it is. Now not only are we unable to attain this ideal ourselves but it seems to be one that from the nature of the case thought can never attain. It seems unthinkable that reality could be reduced without remainder to a set of logically connected universals such as would alone satisfy thought. And this applies not only to reality as a whole or to ultimate reality whatever that may be but to every and any particular real thing with which we are

¹ *Appearance and Reality* pp 544-6 *Logic* II p 675 *Essays on Truth and Reality* pp 272-3

² Note again the ambiguity of knowledge as meaning both knowing and what is known

concerned in ordinary life. There is something in it which not only resists complete rationalisation as far as we can see but seems to be intrinsically of such a nature that it never could be completely rationalised. All philosophers are in the last resort driven somewhere and somehow to recognise an irrational element in the real however hard it may be to determine its relation to the rational.¹

The problem how to reconcile this admission with the fact that to assert this difference seems impossible without somehow transcending thought or bringing the difference into thought exercised Bradley's mind to such an extent that his solution of it is described by him as the main thesis of *Appearance and Reality*.² It consists in maintaining that while everything real has a truth aspect which is revealed in thought there are other aspects without which this aspect is internally incomplete and incoherent so that the inner nature of thought itself forces thought to go beyond itself if it is to attain its ideal. It can only do this by including all the other aspects of reality but this is not to attain mere truth the object of thought but something more than truth in which truth is included and transcended.³

But those judgments which have only the defects inevitable in any judgment as such may remain absolutely true in the sense that they are above criticism as judgments they have not attained absolute truth but to be truer they would have to be more true than truth itself therefore they cannot be replaced by any contrary judgment. The only way in which they could conceivably be amended would be by the incorporation of other sides of experience besides thought and this would give not truth as such but something higher including it. Since according to Bradley's view there is nothing real save experience this something is conceived as a harmonious experience in which thought the truth aspect plays a part but is so interwoven with other elements (conceived as feeling and will) that its nature is essentially transformed. Thought cannot comprehend this in the sense that it can comprehend how it happens in detail.

¹ I realise that my statements in this passage are very vague but it would be impossible to arrive at a more definite statement of the problem without a lengthy discussion for which I have not the space. Let it suffice then to indicate roughly what kind of considerations moved Bradley here.

² Pp 554-5 ³ V especially *Appearance and Reality* p 172

but it can comprehend the general principle that something of the kind must be true. Again this harmonious experience is something which is reached by the internal self development of thought and not imposed on it from without. For anything less than this whole experience would be logically incoherent in the long run and so would not fulfil the demands of thought itself. We are not therefore left with an Other like Kant's thing in itself outside thought.

This is Bradley's main answer to his critics. But valuable as his suggestions are they do not remove the main difficulty of the critics. For though some of our judgments are admitted to be not intellectually corrigible and therefore for us absolute even these are still stigmatised as false and if as Bradley holds to abstract is to falsify they must be so stigmatised. But it remains incredible that all propositions judged by us can be false and self contradictory to assert it if false is used in its ordinary sense and if it is not used in its ordinary sense it is incumbent to explain in what sense it is used.

Bradley does not apply this solution to judgments such as $2 + 2 = 4$ or I am seeing a black patch. These truths are finite and any finite truth remains subject to intellectual correction.¹ For it is not the case that every possible truth can be subsumed under these truths as under the metaphysical truths mentioned above and therefore there is according to Bradley a theoretical chance of new truths contradicting them.² That it may be infinitesimal and so not worth considering for practical purposes is irrelevant. But Bradley would call even such truths absolutely true though in a sense different from that which he applies to the former class of metaphysical truths. For he says a judgment may be wholly true within a special science and relatively to the conditions of that science or again relatively to my real world in space and time and yet not be wholly true when taken without qualification since the conditions of this science or this real world of mine themselves fall short of complete truth and reality.³ An obvious objection is that in that case the hypothetical judgment that e.g. $2 + 2 = 4$ if the conditions in question are granted would

¹ *Appearance and Reality* p. 545

² I cannot believe as has been suggested that Bradley has simply confused uncertainty and falsity but I must admit that I cannot follow his transition from one to the other.

³ *Essays on Truth and Reality* pp. 266-7, 276

be absolutely and wholly true so that we should still have absolute truth. To say that under certain conditions a judgment is absolutely true should mean that if it includes in itself the conditions whatever they are it is absolutely true without qualification. But I take it Bradley would meet this by replying that if such a judgment could be made including all the conditions it would indeed be absolutely true but that there could be no such judgment at least for human beings. For the conditions are partially unknown (no one has succeeded in giving the complete metaphysical and logical basis of any science) and indeed could not be fully known without our knowing everything else since as Bradley insists all truths are interconnected essentially.

But in that case the objector may retort it becomes difficult to distinguish these judgments said to be absolutely true within their own sphere from errors or reconcile the doctrine with our knowledge that $2 + 2$ really does equal 4. The true judgment is not $2 + 2 = 4$ under all conditions—we indeed seem on his view to *know* this like all finite judgments asserted without limitation to be false—but $2 + 2 = 4$ under *some* conditions it being for ever impossible for us to state what the conditions are. Thus if Bradley's doctrine be right would seem to put it in the same position as any other judgment however false let alone uncertain for according to his view all judgments even erroneous ones are true under some conditions the nature of which remains partially unknown.¹ We might however still find a way of differentiating it from judgments stigmatised by us as erroneous or uncertain and thus of setting up a judgment which could claim absolute truth. For we might say that at any rate the judgment that the conditions on which the truth of $2 + 2 = 4$ depends would require much less transmutation in $2 + 2 = 4$ to make it an absolutely true judgment than would be required to make absolutely true the judgment that $2 + 2 = 5$ or even to make absolutely true probable judgments as to matters of fact or more briefly the judgment 'that $2 + 2 = 4$ is nearer the truth than these judgments' is a judgment absolutely true. Now since Bradley holds that the principle of degrees of truth is itself absolutely true in the sense of not

¹ Thus the doctrine of degrees of truth or rather one side of it is affirmed as one of those judgments which are not corrigible intellectually (*Essays on Truth and Reality* p. 273) and is therefore not liable to the same treatment as the finite judgments of mathematics etc.

being intellectually corrigible he may have regarded this last judgment as absolute in this sense but he gives no clear indication that this is his intention. On the contrary he denies this expressly of all finite judgments as opposed to general metaphysical principles and the judgment in question would seem to be finite in character. In any case however his view involves the admission that $2 + 2 = 4$ is strictly speaking not true though nearer the truth than most other judgments. Most readers will not find this good enough. We seem clearly to know that $2 + 2 = 4$ is absolutely true if we know anything and not merely to know that it is true under certain unknown conditions. And if it were not a misnomer according to most of us to speak of it as truer or more certain since it is absolutely true and absolutely certain we should say that it is assuredly truer and more certain than the metaphysical principles which Bradley places above it in the scale of truth and certainty¹. Another objection to his view is that some negative finite judgments at any rate namely the judgments that one or other affirmative finite judgment is not absolutely true must themselves be absolutely true at least in the sense of being not intellectually corrigible yet he seems to mean to deny absolute truth even in this sense to all finite judgments.

But while Bradley's conclusion seems unsatisfactory we must be very grateful to him for having carried to its logical culmination a serious and instructive difficulty which has not yet been completely removed by his opponents. However the controversy like so many others is confused by

¹ Professor A. E. Taylor at the time when he was associated with Bradley's point of view gave an account of degrees of truth which is less paradoxical and easier to defend. It would not be correct to say that if our metaphysical interpretation is valid the view of nature presented in descriptive physical science is *untrue*. For a proposition is never untrue simply because it is not the whole truth but only when not being the whole truth it is mistakenly taken to be so. If we sometimes speak in Philosophy as though whatever is less than the whole truth must be untrue that is because we mean it is untrue *for our special purposes* as metaphysicians whose business is not to stop short of the whole truth. For purposes of another kind it may be not only true but *the* truth (*Elements of Metaphysics* p. 214). The author adds in a footnote that the degree of truth and the degree of reality need not coincide the former being relative to the purpose the judgment is meant to fulfil the latter to the extent to which the nature of the whole is expressed thus removing a confusion of which Bradley seems to have been guilty.

ambiguity of terms for when Bradley and his realist critics respectively speak of judgments they are using the word in different senses. The realists are usually thinking of propositions whether these be regarded as independent subsistent entities or as mere abstractions from the act of judging. Bradley seems to be thinking rather of the act of judging as a whole indivisible psychical event or perhaps better as our whole cognitive attitude to a question including and inseparable from but transcending the assertion¹ of the proposition. If this is what is meant by judgment it is no doubt a misuse of language to apply the terms true and false to judgments at all since we do not speak of mental acts or states as true or false but we can still understand and approve what Bradley meant by calling all judgments both partly true and partly false. For while there seems clearly to be a sense in which the proposition that $2 + 2 = 4$ as asserted by me is certainly and absolutely true it is not so clear that my mental state in asserting it contains no element of error at all either explicitly or implicitly. For it cannot be the mere asserting without grounds or apart from its grounds that constitutes judging as opposed to statement but the seeing or thinking we see that what is asserted is true (or at least that it is rendered most probable by the evidence at our disposal e.g. with assertions based on problematic induction). To judge that S is P is not merely to say that S is P but to be convinced of the truth of this at least momentarily but the experience of conviction of the truth of an assertion cannot be separated either from our apprehension of the nature of that for which the words stand or from the grounds on which our conviction is founded. Where a judgment is based on inference it can perhaps as a proposition but cannot as a psychical event be separated from the inference which establishes it for the person who makes the judgment cannot see the truth of what is judged without at the same time seeing that it follows from the premisses. And even in cases of self-evidence the act of judging must be taken to include an awareness of the nature of that for which the words stand and an awareness that this is such as to necessitate the truth of what is judged. Applying these reflections to the judgment that $2 + 2 = 4$ we see that such a judgment (if as made by a given individual it is a genuine judgment and

¹ I include under assertion the mental assertion to oneself

not as often a mere parrot like repetition of the words or an application on fresh occasions of a judgment already made) must be the seeing that $2 + 2$ really must equal 4 and we can only see this through being aware of the nature of two and of the arithmetical system on which the judgment is based. But whatever the truth as to the nature of two and the arithmetical system it is quite clear that neither I nor any other human being understands this fully. It is one of the most difficult questions ever considered by philosophers. Hence our cognitive attitude in judging that $2 + 2 = 4$ must be in part faulty. It need not include the explicit judging of any false proposition but we could not say what the judgment really is for us what the words really mean for us without revealing views that are partly erroneous.

Likewise if we take judgment in the sense indicated we have no difficulty in seeing what is meant by Bradley's statement that all judgments are at least partly true. For no error however wild is totally without some kind of ground and all errors presuppose some at least partial knowledge. We cannot ascribe a quality to an object however falsely unless we have some knowledge either of that quality as occurring somewhere in reality or of simpler qualities in terms of which it could be defined. No cognitive attitude towards a question can be one of totally undiluted error to consider a question at all we must know some at least partial truth about points relevant to it.

Yet on the other hand it seems clear that there is a sense in which the judgment $2 + 2 = 4$ is absolutely true and the judgments $2 + 2 = 5$ or I am in Australia now absolutely false. This is the case where judgment is taken as meaning not the psychical fact of judging (seeing or thinking we see so and so to be true) but what is judged i.e. the proposition asserted or on a view which rejects propositions as separate subsistent entities whatever it holds to be their equivalent for the purposes of logic and ordinary discourse. Now whatever is the case with our act of judging or cognitive attitude it does seem obvious that what is judged is sometimes wholly true and sometimes wholly false. Clearly $2 + 2$ really is absolutely equal to 4. It is not nearly equal to 4 or only equal to 4 under some unknown conditions or in some slight degree equal to 5. It is because Bradley's opponents are using judgment exclusively in this sense that they can see no strength in Bradley's position. On the

other hand the fault rests partly on Bradley's own head for he never made it at all clear in what sense he was using judgment or in what sense he was using partly false and I should not like at all to commit myself to any definite interpretation of what he meant. All I am trying to do is to point out one important sense in which what he says is true and another in which it is false without committing myself to the view that he was actually using the words in either sense.

If we take judgment as meaning simply what is judged Bradley's arguments for the view that all judgments are partly true no longer apply. The proposition 'I am in Australia now' is not rendered even partially true by the fact that all its content must fall within reality for what would be asserted if the proposition were affirmed would be not that all the content fell within reality but that the content was related in a specific way in which it is not in fact related. In other words the proposition is not rendered even partially true by the fact that there is such a country as Australia and such a person as myself and that it would be physically possible for me to go there. It would not be in any degree partially true even if most of the conditions for my going there had been fulfilled and I had only been prevented from reaching my destination by now through what we call the merest accident. The proposition as a whole is false since what is asserted is not that Australia exists and that I exist and that I might be there but that I am there. It is true that it implies and presupposes all these three true propositions but what proposition the speaker intends to assert must be judged by reference to his purpose and it would not usually be even part of the purpose of anybody who made this judgment to assert that Australia exists and that I exist and that it would be possible for me to go there. Normally these propositions would be indeed taken for granted but not asserted by anybody who said that I was in Australia.

I am inclined to think this the best view to take but I believe that very many philosophers including a number who disagree with Bradley's doctrine of the partial falsity of all judgments would hold that the proposition 'I am in Australia' should be interpreted as including and not only implying or presupposing the propositions 'I exist' and 'Australia exists' but that would only put the absolutely false proposition further back. For while the proposition I have

cited would then have to be analysed into several propositions some of which were absolutely true at least one of the propositions into which it was analysed namely that giving the relation between myself and Australia would be wholly false and not even in some degree true. In that case however Bradley would have been right in holding that almost all the propositions which we assert in ordinary life by means of a whole sentence are partly true in the sense that each one of them can be analysed into several propositions some of which are true. If we are to regard the propositions 'I exist' and 'Australia exists' as included in the proposition

'I am in Australia' we should have equal justification even for regarding the true proposition '5 is a number' as included in the false proposition $2 + 2 = 5$ and the true proposition 'Animals exist' as included in the false proposition 'Unicorns i.e. animals with specific properties bc exist'. Even this admission would not however make truth and falsity a matter of degree but leave a difference of kind outstanding between them. For in the first place a compound proposition which is analysable into simpler propositions one or more of which are false is itself strictly speaking absolutely false even if some of these simpler propositions are absolutely true since what it asserts is that they are all true and this is false. And secondly at least one of the propositions into which any compound proposition could be analysed would still be wholly false.¹

The view that all propositions asserted by us are partly false is more difficult to discuss. Bradley argues that any thing finite has an infinity of conditions and that therefore a judgment asserting it must always be conditioned and what is more conditional since the series of conditions being infinite can never be completed and are certainly unknown in their entirety by us. Facts are only what they are in their context and therefore the abstraction necessary for thought must vitiate the truth according to Bradley for it consists in taking them away from their context. So much

¹ It is perhaps useful to draw a distinction between absolutely false and wholly false. Any proposition which is false at all is strictly speaking by the law of excluded middle absolutely false but it may be analysable into several propositions some of which are absolutely true and then it is not wholly false. But in that case obviously some of the propositions into which it is analysable must be both absolutely and wholly false.

is often supposed to be a necessary consequence of the acceptance of the theory of internal relations or of the view of reality as a coherent system. But I cannot see the cogency of the argument. Even supposing we granted that it were logically impossible for any fact to be what it is if any other fact in the universe were different, a view which goes beyond anything that I should be prepared to admit, it would not follow that a proposition asserting any one fact must *include* in itself propositions asserting all the other facts, unless we assume that A cannot logically entail B without including B, a purely analytic view of inference which is itself untenable and which would also render the view of relations suggested completely impossible if it were adopted. It may be impossible for something to be a fact without a vast number of conditions being fulfilled, and yet possible for us to know (or rightly judge) it to be a fact by means of perception or otherwise without our knowing all these conditions. It may be impossible for A and B to be separated in fact, and yet possible for us to know them separately, i.e. to *know* one without knowing the other, though one cannot *be* without the other. We cannot argue, because A is logically inseparable from B, that the assertion of A is self-contradictory unless B is also asserted, but only at the most that it is self-contradictory to assert A and deny B, a very different matter. It does not follow that, because we cannot say 'A is true and B false' without self-contradiction, therefore we cannot without self-contradiction and even with certainty say 'A is true' without specifying or knowing anything about B. This would only follow if it were the case that B was the only possible ground which could justify the assertion of A, but this need not be so. For we may know A empirically by perception, or be able to prove its truth logically from some premiss other than B, or we may be able to establish its probability by inference from its effects. Perhaps we could hardly in practice come to know any fact in any of these ways without knowing a little about its conditions, but it does not follow that we must know its conditions definitely and fully in order to know it. And perhaps in most cases our relative absence of knowledge as to conditions may impair the certainty of our judgment, but it does not follow that, because the truth of a proposition is uncertain, therefore it is only partly true.

I should again admit that we cannot have a complete knowledge of any one thing without knowing everything.

(meaning by thing particular) For complete knowledge of a particular would comprise a knowledge of all the facts about it and these include its relations to everything else in the universe and to every characteristic of everything else since to them all it will have some sort of relation however indirect. But it does not follow that we cannot know any one fact about it without knowing everything else. I do not see why we should not be able to assert truly that an object is qualified by a universal without knowing everything about that object still less do I see why the proposition that it is qualified by that universal should be held to fall short of truth just because it logically entailed or was entailed by the whole system of true propositions. It may still be true in the universe as it is even if it could not be true in any other universe for the proposition asserting it is a proposition about this universe. To abstract is at the most to introduce a risk of error not to make it inevitable that the proposition reached by abstraction will be partly false. Hence the doctrine of degrees of truth in the sense under discussion does not follow logically from the theory of internal relations on any interpretation which can with any show of reason be given to the latter or from the view that the universe is a coherent system logically connected through and through. It only follows if we assume that because a proposition entails conditions on which it depends it must therefore include in itself these conditions. Whether Bradley ever really thought that it so followed in the sense which his realist critics give to the statement is I think very doubtful. He did hold that *relatively to its purpose* a judgment may be absolutely true and what his opponents insist is not that any judgment can constitute complete knowledge of any particular but that its truth must be estimated by reference to the purpose¹ for which it was made and that it must not be condemned because it does not do this since this was not its purpose. Further and this is more important than a question of mere interpretation if what I have said is right it follows that the current objection to the coherence theory and the theory of internal relations to the effect that these theories lead to the untenable conclusion that all our propositions are partly false must be abandoned. For they do not lead to any such conclusion.

¹ I do not mean practical purpose but merely that its truth must be estimated by reference to what the person who judges means to assert.

This does not prove their truth but it removes one of the strongest reasons against accepting them

Those who use such an argument against the theories in question are in fact employing an argument which would be absolutely fatal to their own views if it were valid. For if it were the case that membership in a coherent system entailed partial falsity it would follow that even if reality is not such a system all propositions which are in fact members of such a system are partially false. Now whether the whole be a coherent system or not it must be admitted that we have coherent systems within the whole. If we take e.g. the propositions of simple arithmetic we find a system which conforms to the standards of the coherence theory and in which each member is internally related to the system in the sense of logical dependence. Consequently if the coherence theory really did entail the partial falsity of all propositions since its opponents would undoubtedly admit that the propositions of arithmetic at any rate if not all true propositions form a coherent system in the sense of mutual logical dependence it would follow that all arithmetical propositions were partly false in any case and it is just these which are usually taken by realists as the most convincing examples of propositions which are wholly true. If coherence entails partial falsity then the propositions of arithmetic are partly false whether the coherence view in general be true or not. If it does not entail partial falsity, the objection disappears. One of the chief aims of opponents of the coherence theory has been to save the certainty and truth of such propositions but if this is their aim to use the argument in question against the coherence theory can only be described as suicidal. But while I think that the doctrine of degrees of truth does not follow logically from the coherence theory interpreted as an account either of the criterion of truth or of the nature of reality I am more doubtful whether it does or does not follow from the coherence theory if taken as an account of the nature of truth. But then the theory in this sense has already been rejected by us and so we need not discuss the question.

In supporting the doctrine that all judgments are partly false Bradley makes use also of other arguments which are not essential to the coherence theory as such but follow logically from his own special position. Thus he claims to have shown that the notion of relations is self contradictory and

can conclude from this alone that all judgments are partially false since all judgments assert some relation. Whether this argument appears to be of any value or not depends on one's attitude to Bradley's view of relations but that view has been discussed earlier¹ and I shall just add that the fact that it entails the conclusion that all propositions which we can assert are partly false seems to me the most formidable objection to the doctrine of relations in question at least if the word 'false' be taken seriously as I think it must be if all relations really are self-contradictory.

Bradley also argues that the subject and the predicate of a judgment are never identical and that therefore 'S is P' is never strictly true.² The obvious reply is that he has confused the 'is' which expresses predication with the 'is' which expresses identity but he means that the notion of predication itself involves an unintelligible combination of identity and diversity. I should agree that it is unintelligible if that means irreducible to anything else or inexplicable in terms of anything else but then is there any need to reduce predication to anything else? It seems to me that the notion of attribute and subject must be taken as ultimately undefinable and even if I be wrong in this the mere presence of both identity and diversity involves no contradiction unless S and P are asserted to be both identical and different in the *same* respect which is clearly not the case.³ There may be other objections to the notion of predication but if so they have not been explicitly produced. But if Bradley had abandoned the attempt to find direct contradictions and confined himself to the contention that the nature of no particular could be adequately expressed in terms of universals and by means of a relational mode of thought and that the attempt to do so therefore to some extent always distorts the truth it would have been perhaps less easy to reply. But I think the conclusion would be better expressed by saying that our assertions are misleading i.e. suggest false metaphysical views than that they are partially false.

There remains an argument connected with the question of meaning. It is that we cannot understand fully what is

¹ V above p. 147 ff.

² *Essays on Truth and Reality* pp. 228-255.

³ I am not however prepared to admit that in predication we are asserting the *identity* of S and P in *any* respect but only their connection.

meant by e.g. $2 + 2 = 4$ without presupposing the whole numerical system. From this consideration it would seem to follow that since our knowledge of the numerical system and of the nature of number is always very imperfect and partial the assertion that $2 + 2 = 4$ as made by us can not have absolute truth and certainty because we do not fully know what we are talking about but are in partial ignorance and even error as to the nature of the constituents of the proposition which we are seeking to express. This argument which does not necessarily presuppose the coherence theory may be applied *mutatis mutandis*, to all our assertions since the words we use always stand for something the nature of which we do not fully know. Now without claiming to provide a complete solution of this problem about meaning I shall contend that it has at any rate been made unnecessarily acute by a confusion between two different senses of what is meant by a word or phrase. What is meant by two may stand for (a) the number two as an objective characteristic. In that case it is plain that we never know fully what is meant by two since we do not know the full nature of this characteristic. But it may also stand for (b) what I or most men intend to express when they say two and this is not the full objective nature of twoness and therefore may be known by us. There are no doubt many cases in which we do not fully know ourselves what we mean even in the second sense e.g. when we are in complicated emotional states or engaged in difficult philosophical discussions but this is not so with all judgments. When we assert that $2 + 2 = 4$ or that London is the capital of England we do know what we mean in this sense though our knowledge of what number is and what England is may be very incomplete and even mixed with error. (We do not know the full nature of the objective characteristics or continuants involved but we do know it sufficiently to differentiate them from any other characteristics and continuants of which the propositions would not be true and we do know that they have e.g. the relation of equality.) Thus when it is said that the study of higher mathematics throws additional light on what is meant by number and the study of physics on what is meant by motion this is certainly true if what is meant by is used in the first sense but not necessarily so if it is used in the second. Such advances in knowledge do throw additional light on the nature

of the objective characteristics which are meant by number and motion but they do not therefore necessarily throw additional light on what we intended to express by the terms in statements made before we acquired this knowledge or even in statements of ordinary life made after the acquisition of the knowledge. There no doubt are cases where such an increase of knowledge leads us to understand better not only the objective nature of the characteristics signified by a word but actually also what we ourselves intended to express when we used the word but I do not see any good reason to hold that this is the case with most definite statements of ordinary life such as there are two tables in this room or an aeroplane can move faster than a train. I must admit indeed that e.g. two presupposes the whole numerical system and from this it follows that I do not know fully what is meant by two in the first sense. But it does not follow that we cannot know fully what is meant by two in the second sense. To know even this much indeed presupposes some rough idea of the numerical system as a whole but this we have and rough though it is it is quite sufficient to enable us to see with certainty that $2 + 2$ must equal 4. Our cognitive attitude towards two may be mixed with error as I have suggested above and yet we may at the same time see the truth of some propositions about two with certainty provided the error is not such as to invalidate these particular propositions.

It seems to me therefore that we can escape the paradox that all our judgments are partly false if we avoid the three fold confusion (a) between judgments and what is judged for it is the latter and not the former which can be true or false and though the former may always include elements of error the latter may still be wholly true. (b) between including and entailing, which leads one erroneously to suppose that the conditions on which a proposition is dependent and which therefore it entails ought to be included in the proposition itself. (c) between the two senses of what is meant by something. I must admit however that I feel less dogmatic about the question than would seem to the reader from the way in which I have stated my solution. But any arguments that remain in favour of the doctrine of degrees of truth certainly seem to be outweighed by its difficulties.

The doctrine of degrees of truth is true as applied not

our understanding and knowledge¹ of reality and not merely our ability to act though it should no doubt be accompanied oftener than it in fact is by the recollection that we have no right to say that the proposition is really true but only that it is the best approximation to truth we can make at present. The intellectual position of the man who treats them thus may be sounder than the position of the mere agnostic who because we cannot reach truth treats all affirmative answers to a particular question as equally removed from truth and therefore because he cannot attain truth deprives himself of any chance of advancing towards it. Half a loaf is better than no bread in regard to the attainment of truth as in regard to other matters though we no doubt must not try to deceive ourselves or others into believing that the half loaf is a whole one.

§ III COHERENCE AS AN ACCOUNT OF THE NATURE OF THE WORLD

About the topic of this section I shall have less to say. The coherence theory as an account of the nature of the world is derived from three principal sources: (a) the argument that coherence is the supreme criterion of truth and that it could not serve as a criterion if reality were not really coherent so that the coherence of the real is an assumption on which all knowledge depends; (b) the internal relations theory; (c) the view that subject and object, judgment and fact like everything else are inseparable which gives its idealist character to the theory. Consideration of the first obviously must await our discussion in the next section of coherence as a criterion of truth while the other two are discussed *ad nauseam* elsewhere in this book. We shall consequently have little to do here but summarise results. First however there awaits us one long postponed task. It is high time to say something about the definition of coherence.

Coherence must not be confused with self consistency. Any body who believed in a thoroughly pluralistic world in which every fact was logically independent of every other would still hold that his view was self consistent in that the different facts did not contradict each other but he certainly would not be maintaining the coherence theory but rather its oppo-

¹ In the wider sense in which knowledge is not limited to propositions possessing certainty.

site What is meant is not merely that the different facts do not contradict each other which would be compatible with their being all quite indifferent to each other logically but that they stand in some positive logical relation of entailment to each other

The easiest way of understanding what coherence means is to consider those cases where the ideal of coherence¹ is admittedly realised or almost realised though only within a limited sphere Such cases are provided by the mathematical sciences and perhaps by certain well knit theories or bodies of doctrine outside mathematics What are the characteristics of such sets of propositions? In the first place in so far as they fulfil the coherence ideal they are so related that any one proposition in the set follows with logical necessity if all the other propositions in the set are true or to put it negatively so that granted the truth of all the rest it would be logically impossible for any one of them to be false and I was first tempted to take this as a definition of coherence But it is not sufficient without supplementation For imagine a set of propositions A B C D E F where writing ent for entail we have the relations $A + B \text{ ent } C$ $A - C \text{ ent } B$ $B + C \text{ ent } A$ $D + E \text{ ent } F$ $D + F \text{ ent } E$ $E + F \text{ ent } D$ In such a set every single proposition would be entailed by the remainder but unless there were some further connection between A B C on the one hand and D E F on the other it would certainly fall short of the demands of the coherence theory for it is universally agreed that the latter is incompatible with any admission of the possibility that there might be several different systems of true propositions altogether logically independent of each other We must therefore enlarge our definition and say that a coherent system of propositions is a set of propositions in which each one stands in such a relation to the rest that it is logically necessary that it should be true if all the rest are true and such that no set of propositions within the whole set is logically

¹ As opposed to comprehensiveness The absence of comprehensive ness i.e. the fact that such a system of coherent propositions always covers only a very limited part or aspect of reality leads advocates of the coherence theory to hold that the coherence in its fullness is only apparent and that there are lurking contradictions But any definite conception of ideal coherence they have still seems to be derived from those cases where something like the ideal of coherence is apparently though according to them at least not really realised by us

independent of all propositions in the remainder of the set I call two sets of propositions logically independent where no proposition in one set either entails or excludes directly or indirectly ¹ or belongs to a set of propositions drawn from one or both of the sets which conjointly entail ² or exclude directly or indirectly any proposition in the other set. The view that reality as a whole constitutes a coherent system might be described as the view that the sum total of true propositions describing all the different facts there are constitutes a coherent system.

Professor Stout says that coherence

rests on the principle that the Universe contains no *loose* elements. No partial feature entering into its constitution could be other than what it is without correlated difference in other features which would again involve correlated differences in yet other features and so on indefinitely. Thus if anything in the universe is had been will be or could be other than it is has been will be could be or could have been the difference would penetrate the whole in its systematic Unity ³.

all of which could also be deduced from my definition. Mr Price describes a coherent system as one such that if any one proposition is true it strengthens the probability of all the rest ⁴. Other possible definitions are (a) a set of propositions or of facts such that justified inferences can be made from any member of the set to any other (b) a set all the members of which are relevant to each other. Finally Professor Joachim has said that

a system possesses self coherence (a) in proportion as every constituent element of it logically involves and is involved by every other and (b) in so far as the reciprocal implications of the constituent elements or rather the constituent elements in their reciprocal implications constitute alone and completely the significance of the system ⁵.

In this definition part (a) goes rather further than the earlier definitions while part (b) adds a new point which will be

¹ I say that A entails B where granted A B is logically necessary. By A indirectly entails B I mean that A entails a proposition X which either itself entails B or entails further propositions which in their turn entail B.

² I say that A and B conjointly entail C where the compound proposition A and B entails C but neither A nor B alone entails C.

³ *Studies in Philosophy and Psychology* p 316.

⁴ *Perception* p 183.

⁵ *Mind* 1905 N.S. no 53 p 9.

discussed later. In regard to (a) I should say that unless we adopt the doctrine of degrees of truth rejected in the last section this part of the definition does not apply in the least even to the most coherent systems we know. For even in mathematics no proposition taken by itself involves all the rest. It only does so if we add to it others unless we already assume the view which I suppose Professor Joachim would hold as at least an approximation to the truth that every proposition in mathematics really includes as part of its meaning the whole mathematical system by which it is conditioned from which it would follow that we cannot fully know any mathematical proposition whatever. I do not know which of the above definitions expresses best the usual meaning of coherence as the term is employed by members of the school in question. Very probably it is Professor Joachims but I have rather stressed my own as it seems to me to constitute the *minimum* definition without which a system could not be said to be coherent and is more capable of establishment.

I think however that it is wrong to tie down the advocates of the coherence theory to a precise definition. What they are doing is to describe an ideal that has never yet been completely clarified but is none the less immanent in all our thinking. It would be altogether unreasonable to demand that the moral ideal should be exhaustively defined in a few words and the same may be true of the ideal of thought. As with the moral ideal it may well be here that while formulae are helpful they can provide no complete stereotyped account and that the only adequate approach is one for which there is no space in this book namely a study of what our thought can do at its best by means of numerous examples.

That the coherence view is true at least on my minimum definition follows logically if we grant the truth of three propositions. They are (a) that everything is causally determined (b) that everything is, directly or indirectly causally connected with everything else so that there is no series of events in the universe which is causally independent of all events outside that series (c) that the relation of causality involves a relation of logical entailment so that whatever is causally impossible is also logically impossible relatively to the rest of the causal system. Propositions (b) and (c) I have sought to establish by argument in the last chapter.

at least as regards the world we know (for I do not see how we can disprove the possibility that there are other unknown worlds of some kind whether physical or non physical not causally connected in any way with our world) I am also inclined to hold that proposition (a) is true provided causality is not understood as equivalent to mechanical causality ¹ so I am inclined to accept the coherence theory thus defined as an account of the nature of reality as far as it can be known or reasonably surmised by us. It also seems to me that the importance and indeed indispensability of coherence as a criterion of truth makes it reasonable to hold that it or something like it is true of the real world. And I do not think that this can be disproved by any of the arguments against it of which I know. Most of these will however be discussed in the next section when we deal with the question of coherence as a criterion of truth ².

But I cannot attribute to the theory the logical certainty which its advocates often claim. It is a reasonable postulate I think that reality ³ is a coherent system but to deny this is not to assert something inconceivable or logically absurd. I have more confidence in accepting coherence as a regulative principle which we have some but not complete justification for believing to be true of reality than as a proved category.

But I do think that if coherence can be justified as a principle necessary for all our reasoning this gives us strong grounds for holding that it or at least something very like it is true of reality. If it can be shown that coherence is the criterion or even an important criterion of truth this will be the strongest argument for the coherence theory being near the truth also as an account of reality. The other argument most frequently employed by its advocates namely the one based on the internal view of relations does not however strike me as valid. For though it may be true that all relations are internal in some senses in which this term has been employed I do not see any reason in the nature

¹ V my first book *Kant's Treatment of Causality* p. 210 ff.

² It would take us too far to discuss the argument that the coherence theory is inconsistent with human freedom. I do not deny human freedom in any sense in which it is a necessary postulate of ethics but I do not think that it need or indeed can be analysed indeterministically.

³ I mean by 'reality' our world not an ultimate reality other than our world for which there is no evidence.

of relations as such for holding that they *all* are internal in any sense which involves the coherence theory. But I have added above another argument which has been less frequently employed but seems to me much stronger the one from causality. It should be noted that this is an argument to the effect that everything is internally related to the rest of the world in the sense of being logically dependent on it¹ not to the effect either that everything is related internally in that sense to every other particular thing or to the effect that all relations are internal.

It would not follow from the view that reality was a coherent system in the sense defined that from any one fact you could infer any other. It is not that we could by any chain of inferences starting from one particular fact reach all other facts in the universe but that we could not know the grounds of any one fact in full without knowing the general principles governing the universe on which all other facts depend and that is surely true. We could not understand fully the growth of the flower in the crannied wall without knowing what life as such is and without knowing the general physical state of the earth as a whole which in its turn depends on the sun while the latter probably depends on the whole stellar system for its condition and movements. Nor could we understand the numerical or quantitative aspect of any one thing or fact (and everything has such an aspect) without knowing the general mathematical principles which govern the whole of reality.

Again to say that no one proposition in a coherent system could be false if all the other propositions were *true* is not to say that no one could be false without all the other propositions being *false*. It is true that given a really coherent system of propositions such as that which constitutes arithmetic we could by a process of correct inference pass from the falsity of any one proposition in the system to the falsity of any other. Using \neq to represent is not equal to we could if we assumed that $7 + 5 \neq 12$ infer e.g. multiplying by 20 that $140 + 100 \neq 240$ or subtracting 6 from both that $1 - 1 \neq 0$ and could by similar processes reach conclusions contradicting the true result of every arithmetical operation but this carried to the extreme would be a self-contradictory procedure since we can only prove from this

¹ The tenth sense of internal distinguished the only one which would yield the coherence view

premiss that any accepted proposition in arithmetic is false by assuming as true another accepted proposition of arithmetic e.g. $7 \times 20 = 140$ and so we could only infer from this premiss that all other accepted arithmetical propositions were false by assuming that they were all true. Similarly I suppose with any other coherent system of propositions. So we cannot argue that one of the coherent propositions could not be false without their being all false but only that it could not be false without some of them being so. Thus we need not as far as I can see accept coherence in the sense defined by Professor Joachim¹ though we ought to accept something far more like that than like the opposed pluralist view.

Again I do not see why one part of a coherent system of propositions taken by itself may not be as coherent internally as the whole system. Granted that it would in that case be logically absurd to assert it while denying the rest I do not see why there should be any logical objection whatever to asserting it without either denying or asserting the rest or why its internal coherence should be affected by the non assertion of the rest.² To assert separately from the rest is not to deny the rest.

This brings us to a second aspect of the coherence theory the aspect which Bradley calls comprehensiveness. The advocates of the theory would not regard a system as fully coherent unless it included all its conditions in itself. This would be impossible if there were anything outside itself which either entailed or was entailed by anything in it and so if reality is a coherent system, it follows for them that no other system within reality is coherent since it is not comprehensive. But I do not see myself why its lack of comprehensiveness should affect its internal coherence just as I do not see why it should make it partially false unless indeed we accept Bradley's argument that all relations are essentially self-contradictory. If we define coherence in such a way as already to include comprehensiveness³ it does follow that nothing short of the whole can be coherent but in that case I do not see any necessary connection between the first part of the definition which would have to resemble the one I gave and the second which introduces comprehensiveness as well as internal coherence.

¹ V above p 230

² V above p 220 ff

³ As e.g. Professor Joachim does (*Mina* N.S. no 53 p. 9)

This may seem to contradict what I have said a little earlier to the effect that we could not understand any one thing fully without understanding the general principles that govern reality but that is due to an ambiguity in the term understand. Understand may mean grasp the meaning of a statement in a sense of meaning in which it includes only what is actually asserted not all the implications of the assertion which may be quite unknown to the person who makes or understands it. In this sense it is I hold false that we can not understand anything fully without knowing the general principles governing reality and since we do not in fact know these general principles the possibility of being able to understand assertions without knowing these principles is presupposed in all the knowledge and opinions we actually possess. But understand may mean know the grounds or causes of or know the place in reality of and in that sense it may be true that we cannot understand any one fact fully without understanding everything else.¹

One may hold the coherence theory of reality without being an idealist in the sense in which I have used the term for while mind and object known are on this view internally related like everything else it does not necessarily follow that a physical object could not exist without being known by any mind any more than it would follow that because the English and the Japanese were on this view internally related therefore a particular Englishman could not exist without any Japanese knowing of his existence. It would follow indeed that no physical object we know could have been what it actually is in a universe in which no minds ever existed or were ever going to exist² but this need not perturb the realist. For he is only concerned to assert that unperceived physical objects exist in *this* universe not that they would exist in another hypothetical universe different

¹ The first sense of understand I think is only applicable where we speak of understanding sentences assertions propositions the second where we speak of understanding facts laws changes

² Note this last proviso. The view would not imply that no physical objects ever existed prior to minds but only that although they existed before mind they could not have been exactly what they actually were if it had not been the case that minds were to follow. This would be true even if we took the view that changes in matter were the sole cause of the origin of minds for granted that C has in fact an effect E it is clear that C could not have been what it was (in other respects than this causal property) without being such that the effect followed

from the one in which we live and in *this* universe there are minds. Idealists have in fact often confused the issue and supposed that because physical objects and minds like everything else were internally related therefore physical objects could not exist unperceived but this as I have tried to show earlier is a mere mistake.¹

Nor is the coherence theory incompatible with a degree of pluralism. It would be absurd because everything is thus interconnected into a system to overlook the circumstance that the connections between different facts are not equally close that everything is not equally relevant to everything else and that the relevance may be so slight and the connection so remote that in predicting or describing a process we may be able to ignore most of the other facts in the universe and fix our attention only on a few. If the universe were not fortunately for us thus constructed there would be an end of all science and of all rational practical activity. But though advocates of the coherence theory have not emphasised this point enough it would be quite unfair to use it as an objection against their theory which was never intended to deny the presence of different degrees of relevance.

Again there is no reason that I can see why the coherence principle should conflict with the infinity of the universe. Even if an infinity of events occur each event may still be determined by others and they may thus be all directly or indirectly interconnected. Further provided an infinite series is governed by some law or laws its infinity need not necessarily make it unintelligible as can easily be shown with the infinite series of mathematics and may for all we know be the case with the infinite series of events.

§ IV COHERENCE AS THE CRITERION OF TRUTH

Having considered the coherence theory as an account of the nature of truth and as an account of the nature of the world let us now consider it as an account of our criterion of truth. Absolute coherence is unattainable by us but if we are to apply coherence as a criterion at all we must assume that the nearer we approximate to this ideal the more truth we are likely to have attained.

The most convenient method of considering this question will be by attempting to reply in succession to various objec

¹ V above ch II sect 4

tions that have been brought against the theory. The first is that even if the criterion of coherence can be applied to subsidiary conclusions it cannot be applied to the fundamental principles of logic and in particular to the coherence principle itself. The reply is that coherence may serve as a test in a twofold sense: subordinate truths may be established by their coherence with other already accepted truths; a fundamental principle by showing that it is a necessary presupposition of any attainment of truth. In both cases we are using the coherence test: only in the one we are working forward with it, so to speak, and in the other working backward. The proof of the coherence principle itself would lie in showing that it was presupposed in all our thinking, and if this could be shown it would be fair to maintain that it had been itself proved by its coherence with all other truths, the attainment of which truths it alone made possible. The circle involved is not vicious in the case of a principle which is necessary to all thought, for if it has really been shown that the coherence test provides the only possible test, it has been shown that the only alternative to its adoption is the impossible one of absolute scepticism. According to Bosanquet, the ultimate argument in proving anything is always the disjunction—this or nothing¹, the appeal to which is inseparable from the principle of coherence, or is even, we might say, the same as that principle viewed from a different angle.²

If the only complete proof is in the last resort by means of the dilemma, Believe this or believe nothing, it is equally the case that if there is any principle the denial of which without contradicting our whole system of beliefs would contradict the whole of a really important department of belief, we are justified in at least provisionally holding fast to this principle till it can be shown either that we were wrong in our estimate of its importance and may replace it without destruction to the

¹ Ultimately even with subordinate truths, for otherwise the more general truths on which their justification is based might always be themselves questioned.

If we ask whether the compelling feature of implication lies in the alternative, This or nothing, or in the connectedness of genuine wholes, the answer must be that the two are inseparable. If there were no connectedness there would be no such consideration as

If I deny this I must deny that. If the connectedness were not with all we have, we could never reach the final proof. If I deny this I must deny everything. (Bosanquet, *Implication and Linear Inference* p. 19)

sphere of belief in question or that its retention would lead to still greater incoherence elsewhere¹ Many thinkers who are not advocates of the coherence theory have insisted that the justification of even an *a priori* principle may lie in its consequences as well as in its premisses or in its self evidence²

Another more important objection is derived from the empirical character of our knowledge and opinions the greater part of which seem to be based on experience and not on considerations of logical coherence The answer given by the advocates of the coherence theory is threefold

(1) It is admitted that the criterion for us is not merely coherence but coherence with our experience or coherence together with comprehensiveness i.e. to be accepted a system must not only appear coherent internally but must cohere with any empirical data An advocate of the coherence theory would hold as Bradley and Bosanquet do that the two criteria ultimately fall together since the Whole being the only fully coherent system the omission of anything real must lead not only to incompleteness but to internal inconsistency in proportion to the greatness of the omissions but he may still admit as these two thinkers also do that they often fall apart for us

(2) It is denied that there are any empirical data apart from interpretation which itself presupposes some kind of systematic ordering of experience into a more or less coherent whole It would be commonly considered a merely empirical fact that there is a table before me but in making even such simple assertions I am presupposing a whole system of interpreting *sensa* in accordance with previous experience I am implicitly assuming for instance that a certain perceived shape under the

¹ I should myself certainly hold this attitude to be justified in regard to any principle which was really necessary to ethics or religion

² E.g. Mr Bertrand Russell referring to mathematics and mathematical logic says Some of the premisses are much less obvious than some of their consequences and are believed chiefly because of their consequences This will be found to be always the case where a science is arranged as a deductive system With the empirical sciences this is evident Electro dynamics for example can be concentrated into Maxwell's equations but these equations are believed because of the observed truth of certain of their logical consequences Exactly the same thing happens in the pure realm of logic the logically first principles of logic—at least some of them—are to be believed not on their own account but on account of their consequences (*Contemporary British Philosophy First Series* p 362) V also Dr Schiller *Logic for Use*

given conditions which are very complex though never explicitly formulated by me (— if I were walking in the street or in some place where I did not expect to encounter tables I might interpret the same *sensa* quite differently—) is an adequate clue to justify the assertion of characteristics which go beyond anything immediately perceived. Also the thought of a table itself presupposes a whole system of classification of objects into animate and inanimate natural and artificial etc besides a reference to human purposes which make intelligible the structure of tables. We are again in all assertions about physical objects assuming the validity of the perceptual criteria we have in use for determining the characteristics of the latter. I am assuming e.g. that the shape I see when looking straight at an object from a distance of a few feet is identical with or very like its real physical shape or that the allowances usually made for shapes and sizes as seen from other positions are correct. I am not conscious indeed of all these assumptions but they are assumptions in the sense that they would have to be made explicit and defended if my assertion is to be ultimately justified. It might be retorted that while this is true of physical objects we can still take perceptions of *sensa* and of our present state as giving a purely empirical knowledge without any presuppositions but as soon as we try to state what such empirical data are we have to introduce universals thus presupposing likeness to remembered previous data and a whole system of classification etc. The presuppositions are fewer with propositions such as 'I see a yellow patch' or 'I feel a pain' than with propositions about physical objects but they are still there. Again analysis itself is a form of inference from a confused whole as premiss to some distinguished parts of this whole as conclusion and as such may be said to be tested by its ability to help toward the coherent systematising of the confused whole given. Consequently even the knowledge of such simple propositions is not merely dependent on what is given but requires the employment of the coherence criterion i.e. we must use that system of interpretation which has been most successful in making previous experiences coherent.

(3) The principle of accepting as fact what one immediately experiences can itself be justified by the coherence theory for if we did not adopt it we should either have no content for our knowledge at all which justifies the principle by the This or Nothing argument or if we made content for ourselves by

accepting mere fancy as fact we should have no ground for preferring any one fancy to any other and could not accept them all without self contradiction. To take what I perceive immediately in myself and my sensa as fact to accept my memory as trustworthy except where there is special reason for doubt and to take a similar attitude with more allowance for doubtful cases in regard to my perceptions of the physical world and my reliance on the testimony of others whom I suppose to view the world as I view it— these are principles by which I construct my ordered world such as it is. And because by any other method the result is worse (less coherent with our experience) therefore for me these principles are true.¹ We use that is in interpreting our experience those principles the consistent employment of which leads in general to the greatest coherence or at least that is the only way in which our use of any principles can be logically justified. The well known objection that there might be more than one coherent system can be similarly met by a use of the contentions I have marked as (1) and (3).

Another objection to the coherence theory is founded on the existence of truths which seem self evident without inference. An advocate of the theory would reply that in so far as we were right and not under some illusion in thinking that we saw them to be self evidently true there was implicit in our thinking as real ground our whole previous impression of the system to which they belong.² Thus $2 + 2 = 5$ is rejected as self evidently false because it conflicts with our whole idea of the number system and $2 + 2 = 4$ is accepted as self evidently true because it is implied by this system so obviously as to make argument unnecessary. That it is some very rough idea of the numerical system as a whole which is our basis and not a single intuition detached from this is supported by the fact that the meaning of the statements cannot be understood at all except as involving this system.³ And we may deal similarly *mutatis mutandis* with the cases of strong conviction

¹ Bradley *Essays on Truth and Reality* p. 213 (In making this statement he expressly mentions only memory and reliance on the testimony of others but the additions I have taken the liberty of making seem to me justified and in accordance with his views.)

² Such a proposition might again be true either because it followed from the system or because the very existence of the system presupposed it.

³ I.e. some rough idea not a complete knowledge of the system v. above, pp. 224-5.

not amounting to certainty which seem underived from argument. If it is rational at all as indeed it often is this conviction can be held to be based on our general opinion of the subject matter as a whole which is incoherent with the proposition that we reject as probably false or coherent with the one that we accept as probably true though we may be unable to specify more definitely how it is coherent or incoherent.

It may be objected however that this reply only puts the difficulty further back. A proposition is seen to be true it is said because it coheres with the rest of the system but how do we see it to cohere? Surely even if the truth of the proposition itself can only be discovered by the coherence test its discovery presupposes that we can see the truth of another proposition independently of the coherence test namely the proposition that it does cohere with the system. It cannot be maintained that this is only established because we see that it is more coherent for it to cohere.

This objection shows that the second proposition cannot be related to the coherence test in the same way as the first. If the first (X is true) is a deduction from the coherence principle the second (X coheres with other true propositions) is not a deduction from it but a particular application of it. The objection is fatal to the coherence theory if the theory means that the truth of every proposition must be based¹ on its coherence with the system because this cannot hold of the proposition that a given proposition thus coheres. We must suppose that is in some cases an immediate insight to the effect that X is coherent or incoherent with the system which insight is not itself based on a further argument from coherence otherwise the criterion would not be applicable to anything at all. But such an admission might still leave coherence in the position of the sole criterion for the immediate insight would consist simply in seeing whether a proposition conforms to this criterion and so is true or contradicts it and so is false and the essential force of the coherence theory would not be impaired at all. To use any criterion we must be able some times to see whether a given object conforms to it or not.

Most advocates of the theory would say identical with not based on and thus escape the objection by denying that the second proposition I have mentioned is distinguishable from the first. For they hold the coherence theory not only as an account of the criterion of truth but as an account of what truth is. This view I have however emphatically rejected already in sect. 1 of this chapter and so this way of escape is not available for me.

To know or think something to be self evident would then be to see or think we see that it coheres

An interesting and up to a point valid objection is brought by Dr Schiller who argues that even if which he is unwilling to grant it were the case that an absolutely coherent system of propositions must be absolutely true it would not follow that of two imperfect theories the more coherent one must be nearer than its rival to the complete truth

We cannot assume that the road to truth runs in a straight line that we are approaching truth at every step and that every apparent approach is really on the road to success One might as well assume that the right route up a mountain must always be one that goes straight for the summit whereas it may only lead to the foot of an unclimbable cliff and the true *route* may lead a long way round up a lateral *arête* This simple consideration really disposes of the assumption that we can declare one theory truer than another in the sense of coming nearer to absolute truth without having previously reached the latter and the history of the sciences fully confirms this inference by furnishing many examples of theories which have long seemed all but completely true and have then had to be discarded while others which looked quite unpromising have in the end proved far more valuable ¹

This argument seems very formidable but an advocate of the coherence theory might reply that it only proves what any reasonable person of any school would always have admitted that of two theories falling short of certainty the one supported by the strongest evidence at a given time may in fact be further removed from the truth But this fact as Dr Schiller recognises in connection with his own theory does not make it wrong for us to accept whichever theory has the stronger evidence in its favour as the one *more likely* to be true (or at least more likely to be nearer the truth) ² Except where a proposition is logically necessary we cannot be sure because it has most evidence in its favour that it is true or even nearer the truth than any alternative hypothesis which we can frame at the time but as Dr Schiller insists we must go by probabilities and it is universally assumed that the

¹ *Logic for Use* p 311

² *Other things being equal* i.e. in the absence of any specific ground to suspect the contrary we should choose the path that led direct towards the summit of a mountain rather than some other one as more *likely* to bring us there

theory which seems most in accord with facts (this may well be expressed by saying which coheres best with our experience) is most likely to be near the truth It may not be true it may even be further from the truth than a theory which now for us has definitely more evidence against it and less in its favour but in the absence of certainty the best we can do is to take it as a probable hypothesis If we suspended our judgment when certainty was not available we should have no science outside mathematics and formal logic and we obviously cannot adopt the principle of accepting a hypothesis which has less rather than the hypothesis which has most evidence in its favour If we take coherence as meaning mere internal coherence irrespective of experience then it is inadequate as a criterion but that is not what is meant by the leading advocates of the coherence theory They insist indeed that experience *per se* does not give us data apart from systematisation i.e. apart from the application of the coherence principle but experience still remains essential for knowledge *in conjunction with* the coherence principle Further the principle of accepting our experience as evidence can as we have seen itself be justified on grounds of coherence ¹

The circumstance that a theory includes coherently all the facts we know seems to prove that it is very likely to contain at least much partial truth for even if it is not completely true itself these facts must still be somehow included in the true theory and it would be too extraordinary a coincidence if a principle from which a great number of detailed facts could be deduced were totally wrong and not rather a sub case of or approximation to the true principle The claims of a particular theory are also often strengthened because there seem to be some grounds ² for holding that it is the only possible theory which will agree with our experience

We may however accept Dr Schiller's argument as a stern warning against dogmatism No doubt if one assumes as Dr Schiller does that the coherence theory holds up an unattainable standard of absolute certainty and that it does not recognise the problematic and tentative character of most of our actual reasoning it is right to protest against it but I can see nothing to justify this interpretation of the theory I should have thought that the doctrine of degrees of truth

¹ V above pp 239-40

² Though not conclusive grounds for we cannot be sure that we have thought of all possible alternatives

however we may criticise it quite definitely implied that all our judgments were uncertain¹ as much as does Dr Schiller's theory. The theory of degrees of truth errs in attributing to them all not only uncertainty but partial falsity and in holding that the uncertainty applies even to judgments such as that $2 + 2 = 4$ but these are errors of the opposite kind to those of which Dr Schiller complains in his very clever polemic against all non pragmatic systems of logic.²

A second objection by Dr Schiller to the effect that the coherent system would have to include the assertion of a person who denied it and so would not be coherent but contradict itself seems to me more easily refuted. For while it could not include such an assertion as a true proposition it could and would include it as a psychological fact and this is all that is needed. Errors must be included in the real *qua* psychological facts but they assuredly need not be included *qua* true propositions. If they were all views and not only the coherence view would be involved in self contradiction.³

Another objection brought against the coherence theory is that it slurs over the vital difference between deduction and problematic induction. Bosanquet replies in *Implication and Linear Inference*—a book which is as important as any for the understanding of the theory—that induction resembles deduction in being ultimately based on the principle of — This or nothing. We may have no insight into the causal laws governing nature⁴ but nevertheless in deciding what these laws are we can only be swayed either by the impossibility of reconciling the phenomena of our experience with any other laws or by the circumstance that the laws which we postulate are such that a number of different actual facts can be deduced from them thus increasing the coherence of our experience by

¹ Except for a few metaphysical judgments

² In *Logic for Us*

³ When we know the truth we can very often see just why particular errors have arisen i.e. make them coherent with our system. That we cannot do so always is an objection only against those advocates of the coherence view if any who claim omniscience. We cannot expect to give a perfect account of all errors any more than of anything else.

⁴ The question is separate from the one discussed in ch. IV. sect. 3 as to whether causality involves a relation of logical entailment. Even if that question were answered in the negative it would still remain true that the test for us is coherence with our experience though it would not be true that reality could be described as a coherent system. I should indeed hold this position to be ultimately inconsistent but then I do think that causality involves such a relation.

bringing different elements in it together under the same law. This is the case even with those laws which strike us as the least intelligible and which seem to be based purely on external criteria of *de facto* presence and absence in a way quite unconnected with previous knowledge.¹

Even in the inductive sciences it is sometimes possible to arrive at an elaborate system of propositions each of which follows with logical necessity from the remainder though admittedly the foundations of such a system are less secure since its denial would not destroy the whole of knowledge and it can never be established with logical certainty as the only alternative consistent with our experience. The ideal would be to reach a set of laws which mutually entailed each other and from which all subordinate laws could be deduced so that every fact in the world fell within their range but this being impossible for us we assume that of two theories the one which brings us nearer to this ideal is more likely to be true. To be successful a theory must not be inconsistent with empirical facts and on the other hand it must not just enumerate them without connecting them or causally explaining them. It must if possible bring them under laws and the only evidence for the laws is provided by their coherence with experience. For they form the premisses from which many actual facts can be deduced and thus we bring together into a system what was previously unconnected by deducing different facts from the same set of laws.

It is thus impossible to disprove the coherence theory for it is impossible to get outside it. Any possible ground of objection can be itself classed as an objection based on alleged incoherence and therefore falls within the system by assuming that the really incoherent cannot be true. This does not mean that the theory gives anything more than a very bare and formal account of the nature of valid thought. It has

¹ Bosanquet takes as example the law that excision of the thyroid gland dulls the intelligence and points out that even in a case like this there is plenty of justification for the pregnancy or relevance of relation in a mass of connected knowledge such as that glands are found to possess in their secretions quite specific properties for promoting or arresting organic processes that the organ to which the thyroid gland belongs has evidently peculiar and profound relations with causes of bodily development and that in medicinal use the thyroid extract shows a favourable effect on the intelligence correlative to the unfavourable effect of the gland's removal. Thus the whole theory of hormones and enzymes seems involved (*Implication and Linear Inference* pp 89-90).

said something true but it has not said much and there is endless scope for supplementation by more analytical logicians. But I can see no ground for waving aside the theory as refuted. Any valid detailed logical argument of any sort would be just an example of coherence. No doubt it may be objected that this reduces the theory to the mere uttering of a word coherence which can be interpreted so as to cover all arguments but only by making its meaning so wide as to rob it of almost all significance. To this I can best reply by enumerating what I consider to be the chief contributions of the coherence theory as an account of the criterion of truth and so of the nature of reasoning.

(1) Its insistence on the whole while it may be overdone and is a poor substitute for detailed argument is in principle sound I think. The real criterion for us the real basis of any conclusions we may draw is our whole impression of the subject-matter under discussion, which alone gives significance to our particular inferences. This is part of the reason why it is so difficult to change even a highly intelligent and broad-minded person's views by a single argument for a single argument however strong finds it hard to stand against a whole system of thought. It is also the reason I think why it is so difficult for a person who is not acquainted with a particular science to appraise the value of specific arguments within that science. An argument may appear most inadequate to an outsider and yet be quite cogent within the context of the science. Even the precise inferences of arithmetic or geometry have only meaning within the numerical or the Euclidean (or e.g. Riemannian) system. But 'the Whole' has been misinterpreted both by some supporters and by some opponents of the theory as standing for a transcendent metaphysical entity in which case the evidence for its existence would be dubious and its value as a criterion nil. The Whole as a criterion is only the whole of our previous experience, knowledge and belief. This seems a poor criterion owing to our human limitations but at least it is the best we have. For we obviously cannot on any view use as our criterion experience and knowledge that we have never had. The point that the criterion is the whole seems to me to be admirably developed in greater detail in Bosanquet's *Implication and Linear Inference* a book that has been unduly neglected but suffers less than its author's other works from those defects of exposition which, not without some excuse, arouse the ire of more analytical thinkers and

prevent them from profiting by the philosophical insight which the author still abundantly displays

(2) The coherence theory rightly emphasises the fact that the consequences¹ of a principle may help to justify the principle as well as *vice versa*. This provides a way I think of justifying fundamental principles which would otherwise have to be taken either as based merely on an irreducible self-evidence or as arbitrary postulates. Thus to my mind the ultimate proof of causality is constituted by the fact that without it we could have no sort of coherent system of judgments about events in time. The beliefs in physical objects and in other minds which have given philosophers so much trouble to justify are likewise established (at least in the case of the latter) if we once grant that we must accept the view which makes the most coherent system of our experience. Our experience is made infinitely more intelligible if we ascribe certain very considerable parts of it to purposive minds outside us (other human beings)². (This would not stand as an account of the way in which the beliefs originated but to make such a circumstance the ground of an objection is to confuse the psychological cause of a view with the real reason why we ought to hold the view). If we are to aim at giving a rational account of our knowledge we must strive if possible to bring it under one principle and the coherence principle is the only conceivable one which could serve this purpose. Its 'this or nothing' method does seem to me of the greatest importance.

(3) The coherence principle provides the only rational justification for induction³. The newer school of logicians admit that they have not succeeded in providing such a justification. They seem to have shown that inductive arguments if they are to be valid require several assumptions which it is very unpalatable to treat as self-evident in their own right and which cannot be otherwise justified. But if we assume that in any given case the hypothesis which comes nearest to making experience a coherent system is the one which ought to be accepted then we have a principle by which we may easily justify the inductive process in general and any subordinate principles which it may require. We have arrived at a single

¹ I do not mean the practical consequences

² For the justification of the belief in physical objects v. below p. 327 ff

³ I mean what Johnson calls problematic induction.

principle again and can dispense with a plurality of unjustified assumptions. For obviously any principle really necessary for induction must be *ipso facto* one without which it would be impossible to make any coherent system of our experience and all such assumptions could therefore be deduced from the principle of coherence alone. Further we have arrived at a principle which it is reasonable to regard as possessing self-evidence not indeed in the sense of being absolutely certain but in the sense of having in its own right a claim sufficient to justify belief.¹ At least in particular cases it does seem self-evident to scientists, historians and practical men that it is reasonable to accept the hypothesis which fulfils this condition rather than another which flagrantly does not.² The self-evidence may be explained by the fact that this is ultimately the same principle as is presupposed in all knowledge though no doubt we are not aware of this as the reason why it seems self-evident to us. Unable to see the intelligibility of nature but still convinced that it is there men have developed the notion of a causal system of nature as the nearest approach to the fully rational coherent system which is their vaguely discerned ideal and then made this causal system as coherent as they could.

Differences and difficulties arise because what is coherent with recognised facts may be incoherent with new ones and because there may be conflicting views as to the kind of system required. Thus men naturally first tried to systematise the facts of inorganic nature on teleological lines but this ideal because of its inability to achieve its end has been replaced by the mechanical one and it may be that this too is breaking down now and will be replaced by a third as yet unconceived. From the epistemological point of view at least the coherence theory requires a growing system to meet new experiences and not a rigid externally fixed one³ and the formula is elastic.

¹ I insist later (p. 260) that we ought to regard self-evidence as having degrees.

² No doubt they do not accept the coherence principle in words (they generally have never heard of it) but this does not alter the fact that they always choose the hypothesis which strikes them as possessing the characteristic that philosophers call coherence though they would describe it as 'explaining the facts best' or use some phrase like that.

³ From the ontological point of view the answer would be different in the sense that we cannot possibly regard the change in our views about the system as constituting a change in the system itself. Still I do not see why the coherence theory should be committed to the unreality of time as is sometimes assumed.

enough to be open to a variety of interpretations. It need not be associated with an unreasonable conservatism or a blindness to new facts but if it is to avoid this stigma it must be interpreted in a way which stresses adequately the element of comprehensiveness and thus does justice to the empirical.

To insist on coherence as the ultimate justification of induction is not to claim to provide a substitute for the laborious logical analysis of the principles and methods employed. But these principles and methods would all be applications of the coherence principle and justified thereby¹. They would be necessary minimum conditions without which we could develop no system in science or in a particular science that even faintly approximated to coherence. That our science generally must fall very far short of the coherence ideal is no more an objection to the theory than it is an objection to a moral ideal that our practice perhaps falls still more short of it but we must accept as true those principles without which we could not make any sort of approach to coherence. And it is clear that without assuming some *a priori* principles we could not have any science at all nay could not even validly make the simplest judgment of perception since even that involves a reference to a physical object and so to general laws² the belief in which could not be justified simply by experience but only by arguments which depend on the presuppositions common to all induction.

(4) The coherence theory provides a wider and I think sounder view of logic than one which restricts this subject to inferences capable of being put in definite symbolic form. There is a kind of logic also which is well worth study in ethics art rule of thumb practical life. This logic is based on a general and indefinite but none the less often highly serviceable and even profound view of the relevant whole. Surely a study of good literature does reveal a rational connection.

¹ I do not mean to suggest that people started with the coherence theory and then deduced them from that. Here as elsewhere we can see the validity of particular arguments long before we realise the general principles on which they are based (v above p 159).

² I propositions about physical objects are analysed simply into propositions about what human observers normally see or would see under given conditions then they obviously involve general laws namely as to what they would normally see if they are interpreted realistically then we at any rate cannot justify our passage from sense data to physical objects or our distinction between real physical objects and the objects of illusion or dreams without appealing to inductive or causal arguments of some kind.

of the parts which can rightly be regarded as having a certain logic of its own and again to state a quite different point it is surely clear that most I do not say necessarily all morally wrong actions are fundamentally inconsistent (a logical property) because they in the long run defeat their own ultimate purpose and that this fact is closely connected though not identical with their wrongness. I think that the advocates of the coherence theory press this point too much and have been far from completely successful in their treatment of ethics on such lines but this wider logic is certainly a subject that calls for close philosophical study though I must admit that I am very much in the dark no doubt owing to my own philosophical defects as to what the best way of approaching it would be.

I am thus inclined to accept the coherence theory or some thing very like it as an account of our criterion of truth and therefore as an account of the nature of the world. For even if coherence were not *the* criterion but *only one* criterion of truth it is difficult to see how we could possibly be justified in supposing that because a proposition fulfilled the coherence test it was true unless we assumed that the real was coherent. If something might be real and yet incoherent why should a coherent view be more worthy of acceptance more likely to be true than an incoherent? But I am not able to accept the theory as an account of the nature of truth nor is the theory idealist in the sense defined at the beginning of this book in any form in which it could be accepted by me. I admit that the view has sometimes been developed in a way which overstressed coherence as opposed to comprehensiveness of empirical fact and unity as opposed to difference but then it is impossible to state a theory in a way which will emphasise all sides in due proportion for all readers and without accepting all Bradley's or Bosanquet's views we may still well raise the cry of 'Back to the coherence theory' in face of the irrationalistic and excessively pluralistic tendencies of the present day.

§ V RATIONALISM v EMPIRICISM

Connected with and often underlying the issue between idealism and realism is the still more fundamental one between rationalism and em and a consideration of the

coherence theory brings this second antithesis to a head. With some exceptions most idealists in the positive sense of the term would have to be classed as rationalists rather than empiricists¹ and thus would undoubtedly be true of those idealists who embrace the coherence theory. The association between realism and empiricism is less clear though in practice the chief modern philosophical realists have been inclined towards an empiricist view. It may however reasonably be contended that the logical outcome of the more empiricist types of theory is not realism but that negative subjectivism according to which we have no right to assert the existence of anything beyond the actual and possible *sensa* of human beings and it is significant that it is to this view and not to realism that the Cambridge school which more than any other group of thinkers in this country carries on the empiricist tradition although it started as strongly realist in outlook is now inclining.²

The most important issue between rationalism and empiricism is not whether our ideas have all been derived from experience but whether and how far what is often called synthetic *a priori* knowledge is possible. It does not matter if there are no innate ideas provided we are able in some cases to see logical connections by which one characteristic implies another. The idea of number may be empirical in the sense that we could not understand what was meant by number except through having perceived things capable of numeration but it may still be the case that we can see *a priori* the truth of many propositions about number which yield genuinely new knowledge. What is given in experience may logically imply something that is not so given.

The problem before us has been commonly described from Kant on as the problem of *a priori* synthetic judgments a synthetic judgment being defined as a judgment the predicate of which is not included in the subject but such an account is ambiguous and misleading. In the first place the question is really one not about isolated judgments but about

¹ By rationalists in general I mean those who emphasise the *a priori* factor by empiricists those who emphasise more the empirical factor. I do not mean those if any who altogether deny one of these factors. Short of declaring either to be the only factor in knowledge there are all manner of shades of view.

² This does not apply to Professor Broad.

inferences Secondly there is a sense in which the predicate of all true judgments of the subject predicate form however empirical and however synthetic is included in the subject For if the judgment S is P is true at all P must be a real characteristic of S and must therefore in one sense fall within the nature of S Thirdly this account presupposes the view that the subject predicate form is the only ultimate legitimate form of judgment Fourthly the word judgment is as I have said ambiguous meaning (a) a judging (b) a proposition

At any rate what seems to me of importance is to maintain the possibility of synthetic *inference* that is inference in which the conclusion is not included in the premisses and which passes from one or more facts to a different fact not included in these The word included (or more commonly contained) is indeed used of the relation between the premisses and the conclusion as meaning not that the latter is really a part of the former but simply that it follows necessarily from the former but here included in or contained in only means entailed by and in this sense I have no hesitation in saying that the conclusion of any valid inference is included in the premisses What I insist is that this sense is quite different from the literal sense of included¹ Again we must not because an inference is so extremely obvious that we do not notice that we have inferred suppose that the conclusion is simply part of the premisses Nor must we be misled by the fact that in ordinary speech we often use expressions such as to say A is to say B when we really mean not that A is the same as or part of B but that A implies B

But to turn to a more important and dangerous because more subtle point, in cases where it can be shown that the premiss or premisses would be self contradictory if the conclusion were false (and it may be argued that this is the case with all *a priori* reasoning) it would seem to follow that the conclusion must be itself part of the premisses For how can anything be rendered self contradictory by the denial of what falls outside itself? (This line of thought led to e.g. Kant's difficulties in admitting judgments that were both synthetic and *a priori*) It can easily be seen it will be said that e.g. the premisses All men are mortal and Socrates

¹ No doubt if A includes B A also entails B but I should insist that this proposition cannot be simply converted

is a man taken together would be self contradictory if Socrates were not mortal and therefore Socrates is mortal must be really itself part of the premisses¹

But in the first place whether or not it be the case that the objective facts to which our premisses refer contain the fact that Socrates is mortal as a constituent it cannot possibly be that our premisses do so. For our premisses are not the objective facts as such but only what we know about them before making the inference and in cases of valid inference we do not when we make it for the first time know the conclusion till we have made the inference. We do not know the answer to a problem in mathematics before we have worked it out and syllogistic inferences do not differ in this respect except as regards quickness and simplicity. No doubt the philosopher may say that we knew the conclusion in a sense—a philosopher can always quite simply avoid any objection to his theories by saying that they are true in a sense—or that we knew it implicitly but this is only to say that we knew something which implied it. This point is so obvious that it would be unreasonable to suppose that prominent logicians have really meant to deny it but they very often have at least neglected it and as a result often give a most misleading account of the character of inference. Inference if it is to have any value whatever and indeed if it is to be inference at all must involve a real progress in thought and not merely a repetition in different words or symbols of part of what we knew already and if so it is definitely wrong or at the least grossly misleading to describe the conclusion as included in the premisses.

But secondly even if we take the view as being simply that the *facts* to which the premisses refer (A and B) always include the *fact* referred to in the conclusion (C) not that the premisses themselves include the conclusion² it is at once confronted with a most serious logical difficulty. For in most cases there are at least two premisses referring to facts A and B respectively and C admittedly is not included

¹ I am only taking a syllogism as an example. I do not for a moment mean to imply that all deductive reasoning is reducible to the syllogistic form. Most other forms of reasoning would put the argument which I am going to criticise in a still less favourable position.

² How the two positions are to be satisfactorily distinguished I am not very clear but if they cannot be distinguished that is only another and indeed a fatal objection to the view which we are criticising.

in either A or B taken by itself¹ But if so how can it possibly be included in both taken together? There is no special difficulty about its being entailed by both taken together if entailed is not identified with included but treated as a synthetic relation not further definable but how can it be included in them? How can C be a part of A and B unless it is a part of either A or B? The only way in which this could occur would be if part of C were included in A and the other part in B but that is obviously not the case here It is not the case that part of the fact that Socrates is mortal is included in the fact that all men are mortal and the other part in the fact that Socrates is a man or that part of the fact that York is north of London is included in the fact that Cambridge is north of London and part in the fact that York is north of Cambridge It therefore follows logically that C in cases such as these cannot be part of $A + B$ since it neither is part of A or B nor consists of a part of A together with a part of B Consequently there are facts from which we can validly infer facts not included in the former facts To say that the facts which provide the real premisses are not A and B by themselves but the whole system to which they belong only puts the difficulty further back For C cannot be part of the whole system unless it is part of a fact or facts included in the latter and the same objections would arise against making it part of any of the facts in the system that we could have known before making the inference to C² If on the other hand

¹ It might seem that the fact that all men are mortal obviously includes the fact that Socrates is mortal But it cannot really do so since if it did the conclusion would follow from one premiss alone which is admittedly not the case It might still be a fact that all men were mortal though there never had been such a man as Socrates at all therefore this fact cannot include the fact about Socrates mentioned in the conclusion There are many other inferences where it would be clearer still that neither of the facts to which the premisses refer by itself included the conclusion e.g. $X = Y$ $Y = Z$ $X = Z$ Cambridge is north of London York is north of Cambridge therefore York is north of London Nobody could possibly maintain in these cases that the fact specified in the conclusion was included in the fact specified in either premiss

² That Socrates is mortal is obviously part of the fact that Socrates and Plato are mortal if it is legitimate to speak of a combination of two facts as a fact but facts like this clearly could not on any view be said to form part of the premisses for our conclusion as to the mortality of Socrates for we could not conceivably know them without first knowing what we wanted to prove

the defenders of the view admit that a fact C could be included in A and B together without being included in A and B as taken separately they have really given their whole case away. For this is to admit a synthetic relation such that from A and B we can infer a different fact not included in itself i.e. $A + B$ since it is now admitted that $A + B$ constitutes a different fact from A by itself and B by itself and that this fact can be inferred from the latter. It must be a different fact on that view for it includes C while the facts A and B taken separately do not do so and it must be a fact entailed by A and B taken separately for otherwise we could not make a valid syllogism by combining premisses which we had come to know apart from each other.

Thirdly when we say that the premisses (call them a and b) would be self-contradictory if the conclusion (c) were false we are not really speaking accurately for it is not that there is a contradiction in $a + b$ ¹ taken alone if c is false but simply that there is a contradiction in $(a + b) + \text{non } c$. The proposition $a + b$ itself could not be any more self-contradictory because c was false than it would be if c were true for it remains the same proposition. The contradiction is not within $a + b$ but *between* $a + b$ and *another* proposition. What is self-contradictory is the combination of $a + b$ with non c but this is only to say that there is a relation between $a + b$ and c such that the former entails c and therefore conversely is excluded by non- c . But if we look at the position in this way there is no reason whatever for concluding because the proposition $a + b$ is contradicted by the denial of c either that it must include c itself or that the corresponding fact $A + B$ must include the fact C unless it be already assumed that the relation of entailment is identical with or presupposes the relation of inclusion and this is simply to beg the question at issue. Most logicians seem however not to have distinguished the assertion that S is P is analytic in the sense that its denial would contradict what we previously knew about S from the assertion that it is analytic in the sense of verbal or tautologous or incapable of giving new knowledge.²

The rationalist philosophers prior to Kant are commonly

¹ E.g. Socrates is a man and all men are mortal

² I do not mean to assume that these last three senses of analytic are necessarily identical but I have not space to discuss the distinction between them if any

described as having held that all *a priori* knowledge was analytic but what is meant by this is that they held it to be all deducible from the law of non contradiction and not that they denied that it was synthetic in the sense of producing new knowledge or of being more than merely verbal. That it was synthetic in these senses certainly was their usual view though they may not have expressed it very clearly. It is obvious that they all thought it perfectly possible to obtain new and interesting conclusions about the universe by *a priori* inference from data not already including these conclusions. They thought e.g. that they could prove the existence of God by the help of the notions of causation or possibility and it is quite certain that they did not regard this conclusion as merely tautologous or verbal. On the contrary the essential part of their opposition to thinkers of a more empiricist tendency lay in their claim to be able to establish by *a priori* reasoning such relatively extensive metaphysical knowledge of a kind which while it might be called analytic in one sense was certainly synthetic in another. (Not that I am prepared to accept the view that all *a priori* knowledge is deducible from the law of non contradiction ¹ Some excellent arguments against this view are given in Mr Bertrand Russell's book on Leibniz ².)

Since the view which makes *a priori* reasoning simply a matter of arbitrary definition seems to be gaining strength nowadays I should like to stress one further point in opposition to this view though I could give others also. It is this supposing even we granted that the primary postulates are always arbitrary that they are merely rules of the game though I certainly should not be prepared to admit even this much at least the inference of consequences from them cannot possibly be itself arbitrary. If it were we might given the same postulates equally well draw totally different inferences. If Euclid's presuppositions are arbitrary the hypothetical proposition that if these are true e.g. all triangles must have the sum of their angles equal to two right angles is still necessarily true *a priori*. Otherwise we could while retaining as valid the whole proof down to the last step but one still deny the conclusion and assert with equal justification if we chose that the sum was equal to a million right

¹ Or that the existence of God could be proved in this way

² P 16 ff. I do not know how far their author would endorse them now

angles or to none. I do not suppose that the philosophers of considerable reputation who describe all *a priori* inference as arbitrary have really failed to see this simple fact but they are at least open to the charge of having expressed themselves in a very misleading fashion.

In general I should emphatically reject all the current views of inference which make it analytic in the sense of tautologous or verbal. Such views would reduce all deductive¹ inference to more complicated examples of the type—A is a wooden table therefore A is made of wood—for they make the conclusion merely a restatement in different words of part of the premisses. What possible value inference could have in that case I am quite unable to see. Mathematicians who are anxious to prove such a theory to be true of their own subject would if they were consistent either throw all their mathematical books into the fire or treat the subject as a mere amusement without serious import like crossword puzzles or chess. If mathematics consisted of such a set of tautologies it would not be thinking at all and even its worst enemies admit it to be that.²

But if any synthetic inferences are admitted it follows that there are logical relations of entailment between different facts in the real world i.e. those facts to which the premisses and the conclusion of an inference respectively refer. For it cannot be right to deduce C from $A + B$ unless C is really *per se* and not only in our thought entailed by $A + B$. This is rightly assumed by the advocates of the coherence view and here it is that the problem of this section touches them. For their view of the universe it is absolutely essential that what I have called synthetic inference should be possible and that there should be real relations of logical entailment between objective facts. For this reason and also because of the gross neglect of the synthetic aspect of thought in recent logic and the great intrinsic importance of the ques-

¹ They would also reduce all *inductive* inferences to logically unjustified hopes (and fears).

² All this would not necessarily follow if mathematics were held to be the working out of postulates not known to be true or even known to be false. For mathematics would then still give *synthetic* knowledge if only of the truth of *hypothetical* propositions. I am not trying here to criticise the view of mathematics as hypothetical provided it is admitted (a) that even if the primary postulates are arbitrary the conclusions drawn from them follow necessarily (b) that the inference used is synthetic in the sense on which I have insisted.

tion for philosophy I have thought this digression well worth while but I am quite aware that I have left untouched many more detailed problems which are very closely connected with the subject matter of this section. In excuse I may plead not only lack of space but a confidence that the newer school of logicians can handle them infinitely better than I could which is quite compatible with a strong *caveat* against certain of their general tendencies at least as expressed hitherto and a conviction that their general philosophical outlook badly needs supplementation.

Granted that some valid *a priori* synthetic inferences can be made I do not see any way of determining *a priori* their extent or delimiting in general the circumstances under which they are intrinsically possible. We can no doubt make on the basis of experience of past attempts at inference such generalisations as that we cannot by this means establish new laws of nature but we are not entitled on such an empirical ground to assert that it is intrinsically impossible to do this only that this cannot be achieved by human beings at our present level of development. It seems to me that any metaphysical argument must be left standing to be debated on its own merits and cannot be declared false merely on the ground that it is synthetic where synthetic inference is impossible. I have no doubt however that the great majority of those which have actually been put forward in the past would still be overthrown by this debate on their own merits not because they are synthetic or because they are meaningless but because they are invalid or rest on unjustified premisses.

The more rationalistically inclined philosophers have however commonly erred in putting forward extravagant claims to certainty and despising mere probability. It is no doubt true that we cannot attribute probability to assertions based on *a priori* arguments which fall short of certainty in the same sense as we can to those based on inductive evidence. The principal difference is that while a prediction such as that it will rain in London to-morrow must remain merely probable on the basis of the data given even if we handle our data perfectly an *a priori* argument which claims to prove a given conclusion can only fall short of certainty because there is a doubt whether we who use it are not guilty of some error ourselves. But since in philosophy we can rarely if ever, be certain even after the fullest consideration

that we have not committed some confusion which impairs our argument it remains true that *in this sense* the conclusions of most *a priori* arguments in philosophy are at the best merely probable. So the common dictum that the *a priori* must be characterised by certainty is misleading. It is even misleading to say that while we may be uncertain about an *a priori* argument the argument itself must either be logically certain or a mere fallacy because an argument especially in philosophy may be invalid in the sense that it has not succeeded in establishing what it sets out to prove and yet really prove something *like* the conclusion put forward and so improve our knowledge by bringing those who accept it at least nearer the truth though nobody may succeed for centuries in analysing exactly what is proved. I am afraid that there are few philosophical arguments outside pure logic (excepting negative criticisms of other arguments or of particular views) which have done more than this in the past and I should be happy if in such a difficult subject I should have done as much in the present book.

What has been said applies as much to apparent truths which seem to be self evident as to conclusions of arguments.

Intuition is indeed infallible by definition since if we think it wrong we decline to call it intuition but this purely verbal point does not imply that what presents itself in the guise of intuition must be either certainly right or a mere valueless prejudice. A seeming intuition may be confused and yet give some truth and in that case we shall if we are reasonable not claim certainty for what we seem to see but only probability, or we may have to be content to say I am practically sure that something like this is true.

This is very relevant to all claims that we can know general truths intuitively in ethics religion or metaphysics. If absolute certainty is claimed for propositions supposed to be thus intuited most of such claims quickly become quite untenable and even ridiculous in view of the enormous difference of opinion between different men and the inability of the person who makes the claim in most cases to define satisfactorily what he does intuit.¹ But it is a very different

¹ This is not intended to be applied to formal logic and mathematics nor to all particular propositions in ethics. The view that certainty can be ascribed to general propositions asserting the *prima facie* rightness of certain kinds of action seems also defensible (v. Ross *The Right and the Good* p. 19 ff).

matter if we recognise degrees of self evidence. Then we can admit that there may be non inferential cognitions which while not yielding certainty yet justify belief and while not presenting us with any clear definite proposition yet enhance our knowledge and perhaps form a necessary basis of any advance in a given branch of study at all. It seems to me that such confused non-inferential cognitions form the basis for instance of the categories of substance and cause. Anyone who claims that the validity of these categories is self evident is liable to be challenged to give a precise account of the propositions about them which we do thus know and he will then probably find that any tenable propositions turn out to be so complicated that it is quite unreasonable or even absurd to suppose them self evident¹. But if he admits that our object of knowledge (or better cognition since knowledge implies certainty) is something vague not stateable at least by us, in a definite form of words and only capable of being understood progressively if we add to the original non inferential cognition inference analysis and testing by its applications then this position becomes much less easy to assail. That some such non inferential cognition forms the basis of our belief in induction must be admitted if we are to accept the results of induction as justified at all and is compatible with the fact that logicians have not yet succeeded in analysing completely and stating definitely what the *a priori* element in induction is². It may strike the philosopher as lamentable that our intuitions should be so vague but in the case in point and perhaps in others the deficiency in point of theory is not such a handicap in practice. Intuition or (as I prefer to call it in view of the abuses connected with this term) non inferential cognition is not a ready made knowledge of propositions complete once for all but a developing faculty and one which can only work in conjunction with inference³.

¹ Mr Russell brings this objection against the belief that the principle of causality is *a priori*.

² To describe it as the coherence principle as I did earlier is certainly not to achieve this.

³ That there is such a thing as this immediate (non inferential) cognition at all is sometimes disputed but though it has no doubt been very often asserted illegitimately that it occurs sometimes is proved by the fact that it is presupposed in all inference. To infer we must see the connection between each step and the next *immediately*.

CHAPTER VI

IDEALISM AND THE THEORY OF PERCEPTION

§ I INTRODUCTORY EXPLANATION OF TERMS

WE shall now turn to another set of idealist arguments those based on our alleged inability to justify the belief in physical objects in a sense in which the latter term denotes objects possessing spatial characteristics that exist even when unperceived by us and is not analysable merely in terms of our experience or of what we actually perceive or would perceive under given circumstances. These arguments differ from those which have been discussed under the heading of epistemological arguments in that they are not drawn from a consideration of knowledge in general but from the particular problem of knowledge (or opinion) concerning physical objects. They do not assume any particular answer to the problem as to the nature of knowing and the relation between knowing and the known object but simply maintain the impossibility of justifying on the available evidence a particular set of propositions which fall for realists within the realm of knowledge or justified opinion. The arguments do not belong to epistemology though in their discussion as in the discussion of any other philosophical problem epistemological questions may have to be raised by us.

Further even if valid they could show only that we have no right to assert the existence of physical objects in the sense indicated not that there are no such objects. For the arguments do not rest on any supposed contradiction or logical absurdity in the conception of independent physical things but on the mere absence of evidence justifying belief in their existence. Nor could they be used directly to establish the existence of a universal mind to which these objects would be relative. For we cannot possibly base the conclusion that physical objects exist in God's mind on the premiss that we cannot justify our belief in the existence of such objects. They

must therefore be carefully distinguished from other arguments about the physical world which have been used to justify idealism. When it is urged e.g. that spatial relations imply mind such an argument is not epistemological in character and yet differs from the arguments discussed in the present chapter in these two respects.

(a) It seeks to show not only that we cannot justify the belief in independent physical objects but that this belief is logically absurd.

(b) It is quite compatible with the view that physical objects can be shown to be independent of all human (and animal) minds provided they are dependent on some (presumably superhuman) mind¹ while the arguments to be considered here show if valid that we have no justification for asserting their independence even of our minds.

In the present chapter and the following one I shall confine myself to a consideration of the evidence for the existence of physical objects independent of our minds (whether or not their nature be ultimately mental or such that they are dependent on a divine or absolute mind). By the belief in independent physical objects I shall mean the belief that there are some entities with spatial properties which exist when not perceived or sensed by any human being (or animal) in a sense in which this proposition is not analysable merely in terms of the actual or possible *sensa* of observers.² This phrase is intended only as a rough indication of what I mean not as a precise definition of physical objects. (Under the term belief I include not only explicit belief but implicitly taking for granted as we do at the perceptual level take physical objects for granted.) In these two chapters I shall for convenience refer to this belief as realism or the realist view thus limiting the term realism more than I have done elsewhere in the book so as to cover only the issues of these chapters and not further more general questions as to the relation between knowing and its object or between matter and mind. Independent I shall

¹ V below ch VII sect 1

² I do not mean to imply that each such entity is necessarily a physical object by itself. For some realists hold that any single physical object is made up of a whole group of such independent entities (*sensibilia* or as I call them later unsensed *sensa*) and my account must be worded so as to cover both their view and that of the more orthodox realists. For though they differ in this both classes of realists agree that there are some independent extended entities.

use to mean not totally unaffected by but capable of existing apart from. To deny that A was independent of B in my sense would be to assert that its existence apart from B was either causally or logically impossible. Secondary qualities I shall use in the sense in which the term is used by Berkeley and most modern writers not in the sense in which the term is used by Locke i.e. I shall use it to stand for the actual quality of heat as felt or colour as seen, etc. and not for the causal property in physical objects of producing sensations of colour or heat in us. By direct theory of perception I shall mean any theory according to which some of the immediate objects sensed in perception are physical objects external to our body (in the realist sense of physical objects described) or literal spatial¹ parts of the surface of such objects. By the term representative theory of perception I mean to cover any theory of perception which admits the existence of physical objects in the realist sense but is not a direct theory. I shall draw no distinction between the terms immediate perception and direct perception but use them as synonyms. Nor shall I draw any distinction between physical and material or between physical objects and physical things. Object without the prefix of physical I shall continue to use in the more general sense in which even mental states are objects (of knowledge etc.) but I shall not use it in this epistemological sense when conjoined with the adjective physical. *Sensa* I shall use to mean objects of immediate perception other than physical objects (understood in the sense described) or spatial parts of physical objects.² The terms illusion and illusory I shall use to cover all cases where we should say that a physical thing looks or appears different from what it is e.g. I shall call all the elliptical shapes we see in looking from different angles at a round penny illusory. This is not the usual usage outside philosophy but is for philosophy much the most convenient. None of these explanations of words that I have given must however be regarded as philosophical definitions but only as rough ways of indicating in the interests of clarity how I intend to use the words. I doubt whether they could be made completely unambiguous.

¹ The words literal and spatial are intended to exclude a view like that put forward by Mr Price in his *Perception* which certainly could not legitimately be regarded as a direct theory of perception.

² As will be seen I find it desirable to extend the meaning of the term *sensa* in the last section of the next chapter.

without a very long discussion but I hope that at any rate I have removed any ambiguities which might affect the present argument adversely

§ II DIFFERENT SENSES OF DIRECT AWARENESS AND THEIR PHILOSOPHICAL SIGNIFICANCE

Historically it is perhaps true to say that idealism first developed out of the representative theory of perception. For various reasons it was generally held that we do not perceive physical objects directly but only ideas or representations which they cause in us and then grave difficulty was and always has been felt in justifying the belief in physical objects at all on these premisses. It was partly from these difficulties that sprang Berkeley's theory. Hume's despair of the possibility of defending the belief in physical objects and much of the idealism and agnostic positivism of the nineteenth century. If we are not directly aware of physical objects from the beginning but only of our ideas it is difficult to see how we can ever deduce physical objects from our data. Consequently the representative theory is regarded by many as an untenable half way house to idealism and when there arose at the beginning of the twentieth century a strong school of realists who were determined not to complete the journey they returned to the common sense view that had been abandoned by most philosophers for centuries and asserted direct perception of physical objects. If we are immediately aware of physical things they thought then the idealist cannot deny the existence of the latter. It is therefore necessary for us before we decide whether the belief in independent physical objects is philosophically tenable to discuss first whether the representative theory is warranted or whether we can regard as adequate the attempt to justify our belief in the existence of physical objects by saying that we are directly aware of them. It is to be regretted however that the assertion that we are directly aware of physical objects has been analysed far less frequently than it has been made and we must ask the reader not to expect a quick straightforward solution of the problem but to have patience till we have analysed the meaning of the assertion ourselves. Till we have done this we can never be sure that we are not trying to prove direct knowledge or perception in one sense by an argument which really proves it only in another quite different sense of the words.

In the first place the phrase has been used in opposition to a representative theory of knowledge which must as we shall see be distinguished from a representative theory of perception. Some thinkers have either actually held or been unwise enough or unfortunate enough to use terminology which seemed to imply that they held the theory either that we can only know our own ideas or that knowing A consists simply in having ideas of A and the well warranted rejection of such views gives us one minimum sense in which we must admit direct awareness of any facts that we know at all. Most of those who assert direct awareness of physical objects mean more than this but they mean this at least namely that we know some facts about physical objects (other than facts about the experience they cause in us) in a sense which cannot be reduced merely to having or to knowing ideas which correspond to them. They deem it necessary to insist on this because some thinkers have apparently confused the statement that in order to know anything we must have ideas in our mind with the statement that to know anything is only to know our ideas of it¹ or again with the statement that to know it is to have ideas of it the ideas being conceived as a kind of mental pictures corresponding to the reality. Knowledge of the physical as of everything else may be said to be direct, because it is not a copy in our minds that we know but external reality. So much is clearly true if we know physical facts at all. In general cognition has not to do merely with something in our minds it is essentially extrospective.*

The same applies if we substitute for knowledge belief

¹ As put this statement sounds self-contradictory. But the view may be interpreted in a way which avoids actual self-contradiction if we understand it as meaning that where A is something other than an idea of mine I know A in any sense in which it can be true is simply an abbreviation for I know my idea of A or I know an idea corresponding to A. In that case there would be a sense of know in which we could not be said to know anything except our own ideas and another sense in which we could be said to know other objects the second sense being definable only in terms of the first. The term idea is also extremely ambiguous like concept (v above p 23 ff.)

* I have summarily to exclude a supposed sense of the term mediate which is in reality nonsense. No knowledge however imperfect can be mediate in the sense that something is interposed like a screen between the knowing mind and what it knows. If this were so only the intervening screen would be known not that which lies behind it. (Stout *Studies in Philosophy and Psychology* p 176)

or opinion a point which is still more important since it is extremely difficult even for a realist to claim absolute certainty for any of our judgments about physical objects. Even if I believe and do not know that this table is wooden what I believe is something about the table and not about my ideas of the table nor can believing truly any more than knowing be reduced to having ideas which correspond to the table unless we mean by ideas simply beliefs or somehow already include beliefs in the meaning of ideas. The same applies to beliefs about past events universal laws and minds other than our own. In true belief as well as in knowledge we are in direct relation to the object of our cognition and are not concerned primarily with something in our mind at all (except in the special cases where what we believe or know is admittedly a psychological fact about ourselves and not about anything else) ¹ This outward reference is as essential in true belief as in knowledge and at least an attempt to attain it is essential even if we are to have error ²

But this is not to say that we perceive material objects directly any more than the assertion that we have knowledge or true belief about other minds and not only about our ideas of them is an assertion of telepathy. Even if the knowledge of or the belief in physical facts could only be reached by inference it would still be physical facts which we were knowing or believing in not only our ideas about such facts even if we could only perceive directly ideas or sensa not physical objects our belief that the latter existed would still be a belief not about the ideas or sensa but about the physical objects. The most that could be granted to the representationist would be that we did not know *by acquaintance* anything physical but only our sensa but this would not necessarily preclude us from knowing physical facts otherwise than by acquaintance (or at least from having rational grounds for beliefs which were probably true of them). Even if we hold a representative theory of perception we must distinguish it from a representative theory of cognition and not assume because when we say that we

¹ And even in these cases the fact known is not by any means always an idea of mine (in any even partially reasonable sense of the word) and it can be known without the help of a representative idea.

² Cook Wilson (in *Statement and Inference*) seems to me inconsistent in on the one hand stressing this directness of knowledge and on the other treating opinion and belief even where true as if they had no such direct relation to reality but were just something that went on in our minds.

perceive a material object we are really only perceiving immediately a representation of it that therefore when we say we know something we really only know a representation corresponding to it or that cognition always proceeds by taking as its primary object a sort of representative copy of the object cognised

Neither must we assume¹ that because and where cognition is direct² in this sense we have a mode of consciousness that is incapable of error. Our minds cannot be directly related to the fact believed in error because there is no such fact³ but this does not necessarily imply that there is any *intrinsic* difference between knowledge and error. The difference may still lie only in the lack of a corresponding fact in error. Error is not a different mode of cognition is extrospective just as much as cognition which yields truth only it fails in its purpose. Even in error we are concerned not with our ideas but with external reality. Error consists in thinking that reality is different from what it is not in merely having ideas which fail to copy reality. If there is no reference to external reality there is no error about such reality.

Secondly by the statement that we are directly aware of physical objects we may mean that we do not come to accept their existence as the result of an inference. We do not it is contended patiently abstain from believing in physical objects till we have inferred them from our sense-data. On the contrary we assume their existence from the beginning of life and most people go through life without ever having *inferred* it at all. This sense of direct awareness must be like the first distinguished from what is asserted when we say that we directly perceive physical objects for even if we did not perceive them directly we might still rightly or wrongly accept their existence as self evident without inference. Now it seems to be the case that our belief in the existence of physical objects is non inferential but this so far is only a

¹ As e.g. Cook Wilson apparently does

² I should hold that all cognition is direct in this sense of the term. Cook Wilson in accordance with the assumption I am just discussing insists only that *knowledge* is direct not belief or opinion.

³ Though they may be thus related to the object cognised where object is used to signify a continuant or substance except in cases where we believe that a continuant exists which does not really exist and not merely that an existent continuant has qualities or relations which it does not really have (if indeed these cases are ultimately distinct from the others).

psychological fact. It does not prove that the belief is true. self evident truths are not inferred but neither are irrational prejudices. No doubt if we concede that we have non inferential *knowledge* of physical objects we have been trapped into conceding that physical objects exist for the term knowledge is not applicable unless the judgments dignified by that name are true. But this is merely verbal. we cannot use the fact that a judgment is non inferential to prove that it really is knowledge unless we hold not only that it is non inferential but that it is self evidently true.

So thirdly when it is said that we are directly aware of physical objects it is usually assumed that this awareness gives us both certainty and truth that it is genuine intuitive knowledge. The presence of direct awareness in this sense if we had it would undoubtedly be sufficient to justify us in accepting the existence of physical objects as an indubitably certain fact but it would be quite compatible with holding that what we *perceive* in sense experience is only our own ideas. It might be that we had an intuitive certain *knowledge* of the existence of some physical objects even though we did not perceive any such objects directly i.e. it might be that what we perceived was not the material objects themselves but something else e.g. ideas in our mind and yet that we had real knowledge of the objects not based on inference. Non inferential knowledge is clearly not limited entirely to what we can sensorily perceive and might conceivably extend to the material world. It might also be the case that we had non inferential cognitions of material objects that fell short of knowledge in certainty but yet justified a belief in their existence.

Direct awareness of physical objects does not therefore necessarily imply the direct theory of perception and the latter theory whether right or wrong itself seems to me to gain an unfair advantage in argument from the assumption that it does. Direct cognition would in any of the three senses analysed be quite possible without direct perception and we cannot therefore argue that because the former must be accepted the latter must. But undoubtedly one of the possible senses in which we may understand the statement that we are directly aware of the physical world is as meaning that we directly perceive it and this sense now comes up for examination.

The question of direct perception is primarily not a question

about our cognition at all it is a question about the nature and identity of certain entities admittedly experienced by us i.e. whether the something which we by general consent directly perceive when we use our senses is part of the physical world or not It is admitted that I see e.g. a square brown patch in a sense of see which implies presence to my immediate experience the question between the rival theories of perception is whether this seen patch is physical or not Some philosophers the holders of the representative theory of perception say that it is merely something in the perceiver's mind others the holders of the direct theory say that it sometimes at least exists independently of him and is capable of being perceived by other minds

Now there is one point which is often overlooked The judgment that we perceive material objects directly does not necessarily imply that we know directly that they are material objects We have already seen that we might know of the existence of some material objects directly without perceiving any directly but the converse is equally true For it is quite conceivable that what I perceive might be identical with a physical object or part of such an object and yet that I might have no knowledge of this important fact Indeed this would seem actually to be the case if the direct theory is true at all and if we are speaking of knowledge and not belief for clearly representationists and idealists did not *know* that what they perceived was ever identical with or part of a physical object and it is very unlikely that such a deficiency in knowledge is peculiar to these philosophers Most men may take for granted that what they perceive is a physical object or part of one or again they may have an intuitive conviction that this is so which while falling short of certainty justifies belief but can they be said to know it? If we first assume a knowledge of or belief in physical objects we may perhaps then argue that these objects are perceived directly but this knowledge or belief itself could be based on direct perception only if we included under this term not only the last mentioned sense of direct awareness the sense in which it refers to perception properly speaking but also the third sense or the last of the epistemological senses and said that we have intuitive knowledge (or a conviction justifying belief) that what we perceive is in some cases physical but these two assertions are commonly not separated or distinguished

Further this knowledge or conviction justifying belief

even if it is present could not possibly be given by sense-perception as such. We cannot know by sensory perception as such that the immediate object of our experience exists independently of being perceived unless we can perform the impossible feat of perceiving it without its being perceived nor can we know by sense-perception alone whether other observers see numerically the same things as we see since we cannot observe their experiences directly. We cannot even obtain by sense perception an intuitive conviction justifying belief in these or similar propositions. For the question is not whether what we perceive does or does not possess certain observable characteristics. We may perfectly well perceive matter directly without knowing or believing it to be matter and therefore we cannot use the direct theory of perception to establish the existence of material objects. On the contrary we can only maintain that theory if we have first established their existence by some other means or if that be impossible seen it to be self-evident by some non-inferential cognition which may no doubt for anything I have said accompany our perception.

To sum up before going further we have seen that the question whether we are directly aware of physical objects really covers four different problems.

(1) Is a representative view of cognition true i.e. is cognition a process primarily directed to our own ideas?

(2) Do we come to believe in the existence of physical objects as the result of an inference or intuitively?

(3) Have we or have we not non-inferential knowledge of the existence of physical objects (or in the absence of this at least an intuition¹ or non-inferential cognition adequate to justify belief)?

(4) Is what we perceive immediately sometimes a physical object or part of such an object?

¹ I am here as elsewhere using intuition to mean non-inferential non-empirical cognition without necessarily implying that the cognition yields truth. A word is needed for this and I think the common usage of confining the term intuition to cases of knowledge inconvenient and also misleading because it suggests that there is an internal difference of kind between all true and all false non-inferential non-empirical cognitions and because it leaves no place for the majority of such cognitions which are neither certain nor completely without evidential value of any kind whatever. Nor do I ever follow some writers in using intuition to stand for perception or a species of perception (e.g. of space and time). That is quite a different sense of

We have further seen that we might have direct cognition of physical objects in all the first three senses without ever perceiving any physical objects directly and that we might perceive them directly and yet not be directly aware of them in at least the second and third senses. To perceive a physical object directly is not to know directly that any physical object exists and to know this directly would not be to perceive any such object directly.

It seems to me that the confusion between the question whether we have direct cognition of material objects in any of the first three senses given and the question whether we directly perceive material objects is partly due to the fact that perception is itself a species of cognition. To perceive a fact is to know that fact to perceive a quality is to know that there is an instance of this quality.¹ But it does not follow that to perceive a material object directly is to know a material object if that implies knowing that it is a material object. For while we cannot perceive an object directly without knowing that object in the sense of being acquainted with it it is perfectly possible to be acquainted with an object without knowing all the facts about that object (though not perhaps without knowing some of the facts) and therefore without knowing that it is an independent physical object even if it really is one in fact. Confusion may also be caused by the circumstance that when we do have the experience of perceiving we usually also have the belief explicit or implicit that what we are perceiving is a physical object but this though a usual is not a necessary accompaniment of the experience and is in any case a circumstance distinct from though causally connected with the perceiving.

If I might make a brief digression it is very important to note that the confusions pointed out have also had very detrimental effects on the theory of memory and not only on the theory of perception. As in the case of perception of the physical we find the question asked—Are we directly aware the term and I am confident that I am in agreement with the more common usage in confining intuition to non empirical cognition. This makes non inferential cognition wider than intuition because as we shall see the former is sometimes empirical.

These propositions are not convertible since perception is not the only species of knowledge.

¹ I may perceive something and yet at the same time believe that my percept is totally illusory and does not even represent a physical object.

of the past in memory ' Here again philosophers often seem to think that this question can just be answered—Yes or No but in reality it resolves itself into four separate questions in the same way as the analogous question about our awareness of physical objects The first question is—Do we know the past directly in the sense that remembering a past event cannot be reduced to knowing our ideas about that event or to having ideas about it ? In this sense the direct view of memory is true if we have any knowledge of the past at all

Secondly—Is memory direct in the sense of non inferential ? Here again the answer is clearly in the affirmative simple memory is if not totally unmixed with inference at least as little inferential as any of our knowledge can be When we remember a past event our consciousness of it seems to be its own evidence We do not believe in the event because we argue that it is needed to account for our present ideas *Inferences* as to my past actions are not cases of memory any more than my inferences as to the actions of other people

The third question is—Does memory give us truth ? This is not indeed a question that we can ask as outsiders so to speak since the truth of a memory judgment not being inferred must be cognised in the act of remembering itself and not by means of any external criterion What purports to be a memory must either be an illusion or its own evidence But that it is in very many cases its own evidence and not an illusion we can hardly deny while it is obviously impossible to maintain that there is no such thing as a mistake of memory it is equally clear that memory does give us truth in very many cases

But our affirmative answer to these three questions does not necessitate an affirmative answer to the fourth—Is the fact remembered related to us immediately in the sense in which this is the case with an object of present perception ? Yet special difficulty has been felt about the directness of memory because it has been supposed that if we are directly aware of the past in the first three senses the past must be so to speak bodily present to our mind or occupy the same position as our present objects of perception which it obviously does not do This has led some thinkers to deny the directness of memory altogether and others to assert that what are usually regarded as memory images or some of these, are really identical numerically with the event or object remembered,¹ as it has been

¹ E.g. Professor Alexander *Space Time and Destiny* vol II p 197

asserted that in perception our immediate object is identical numerically with something in the physical world. Hence some have supposed that since we obviously can know the past directly such paradoxes are the truth. Others have supposed that since this is obviously impossible we cannot know the past directly at all. But all this could have been avoided by a simple process of analysis. It is perfectly true that we can cognise the past directly and are not confined to inferring it, but this does not mean that the past is still here as an existent object or that I perceive it as I do what is now given by my senses. It only means that I can make true judgments about it not based on inference.¹ If I actually *saw* the past I might be compelled to hold that it would have to be present while I looked at it, but why should it have to be present now for me to make right judgments about it? That the past should stand in some relation to the present does not necessarily entail its existence now. Otherwise the mere fact that it was past, i.e. related to the present by the relation of antecedence in time, would imply that it was also present. Some relations may entail the contemporary existence of the related terms. This seems to be the case with pure spatial relations, relations like being a friend to, and perhaps the relation of sensing. But there are many other relations which nobody could say implied the coexistence of their terms, e.g. likeness, quantitative relations, causality. In memory I perceive directly my own images or sensations, but these need not and cannot be identified with the event remembered. My relation to them is quite different from the relation I bear to the past event. For I am immediately aware of them as here now, while in knowing a past event I am not immediately aware of it as present but as past. If we doubt the evidence of our immediate experience so far as to say that the images are not really present now but only seem to be so, we might just as well doubt anything.

§ III THE REPRESENTATIVE & THE DIRECT THEORY OF PERCEPTION

To return to the question of perception, the problem here is—Are we to hold that what we immediately perceive is identical (numerically and not only qualitatively) with some

¹ And be aware of their truth.

difficult to split up our perceptions in such a drastic way as any of these mixed theories do. It seems arbitrary and unjustified to say that some are direct if most are shown by the fact of illusion to be representative or to say that some are representative if on general grounds we have established a direct theory. But these views at any rate all agree in admitting both physical objects and *sensa* and in admitting that with regard to a great many perceptions the non direct theory is true.

To turn to other solutions various as I think unsuccessful attempts have been made to reconcile direct perception with illusion. It must in any case be admitted that judgment can be erroneous and it may be held that we ought frankly to admit the same in the case of perception and conclude that we may perceive an object directly and yet perceive it wrongly. This is the solution adopted by Professor Laird in *A Study in Realism*.¹

There is a risk of error, he says, in every species of apprehending and not merely in judgment. That which confronts the mind may or may not be as it seems. An illusory percept to be sure claims to be as it seems and it is verily a determinate appearance but that is not to the point since precisely the same thing occurs in a false judgment. Anyone who judges that Caesar died in his bed has a thinkable complex before his mind which is something appears to be true and is false in fact.

Now here is I think another case where failure to distinguish the different problems involved in the apparently simple question of direct awareness leads to confusion. For the issue is really quite different in percept on and in judgment although at first sight it seems the same. To make this clear let us call the object as it appears to us or is judged by us *A x* and the object as it really is *A y*. Now in the case of perception it is a fact that *A x* exists. It is a fact that converging lines are really there before us when we look at the avenue we have as good evidence for that as for almost any empirical judgment. What the direct theory of *perception* says is that *A x* (the avenue as perceived that is the converging avenue) is identical with *A y* (the real physical avenue) or at least a part of *A y* and this is clearly false unless the same physical object can have different shapes at the same time. But no theory of cognition held by anyone asserts that *A x* (Caesar dying in bed to take Professor Laird's instance) ever could be identical with or a part of *A y* (the real state of Caesar) unless

it were the case that Caesar really had died in his bed. In the case of true judgments there is no difficulty about the identity between A_x and A_y . In the case of erroneous judgments there are two alternative views held but neither view implies the identity of A_x and A_y . Some philosophers hold that if I judge Caesar to have died in bed my erroneous belief or judgment indeed exists as a psychological fact as a state of my mind but the fictitious object—Caesar dying in bed—has and had no kind of existence or being. But in this case since it did not exist at all it could not be identical with the real state of Caesar. Other philosophers e.g. Meinong hold that even objects of error have some kind of being though a different kind from that possessed by ordinary existent objects but even such a theory would never imply identity between what is asserted in an erroneous judgment and the real state of the object of which the assertion is made. It would maintain that both A_x and A_y have some kind of being but not that A_x is identical with A_y . In the case of perception we have to start by admitting the existence of a certain object namely that which we immediately perceive and which we know by the evidence of experience to be two lines converging and are then asked to say that this object is numerically identical with something namely a physical avenue which according to Professor Laird does not converge in this way. In judgment we have a state of mind certain auxiliary images that which is judged and the real fact with which the judgment accords or conflicts and he would not I think imagine that the real fact the murder of Caesar could be identical with any of the other three elements in the situation either with our state of mind in judging or with the images (probably words) which accompanied the judgment or with what is judged namely that Caesar died in his bed. The position in other kinds of cognition and in perception is quite different. The difficulty in the case of perception is not the mere fact of error but the demand that we should hold both that what we immediately perceive is numerically identical with a physical object or part of such an object and yet that it is quite different. This difficulty could not be removed unless it were held that we did not really see e.g. the avenue as converging and to maintain this would be to contradict the plainest evidence of our immediate experience. If we merely judge that two lines of trees converge they may quite well really not do so but if what we immediately per-

ceive is two converging lines what we immediately perceive cannot be identical with the physical lines of trees unless these converge also

The conclusion seems to be that there is no way out of the dilemma before us. Either everything we perceive is independently real just as we perceive it or the direct theory is not true in all cases and perception is at least sometimes indirect or representative in character. Professor Laird himself however seems to give his own case away when he says in the next paragraph¹. It might be otherwise if judgments based on perception referred to the percepts on which they are based but that is certainly not the case a statement which suggests that it is only the inferences which we are tempted to draw from perceptions that are erroneous not the perceptions themselves. He explains that the judgment based on perception may refer to the object as a whole not to the sign fact qualifying the object which sign fact alone constitutes our percept² provided our percept is thought to *mean* the object meaning being on his view an objective relation not necessarily implying a mind or mental in character. But this still leaves him in a dilemma (or trilemma). If he is going to hold that we always perceive the sign fact correctly and to ascribe all illusion to its not meaning what it seems to mean he will have to admit that the coloured shapes³ the drunkard or fever patient describes as snakes or rats the bent shape we all see when we look at a straight stick in water and the duplications we see when our eyeballs are pressed all exist in the external physical world. If he does not hold this he will have to maintain either that our percept is not always numerically identical with anything physical or that we do not e.g. perceive anything bent at all when we look at a stick in water but only think we do. The two first alternatives constitute the two horns of the dilemma I have already put forward the third since it has seemed at different times to various thinkers to constitute a possible way out of the dilemma will now be discussed further.

It has been suggested⁴ that what we perceive immediately is

¹ P. 42

² I.e. *perceptum*

³ Shape is here used for brevity's sake as equivalent to shaped object of immediate perception

⁴ E.g. by Professor Moore *Philosophical Studies* pp. 243-7. Professor Prichard *Kant's Theory of Knowledge* ch. 4. (In the passage cited however Professor Moore is far from committing himself decisively to it and he has now abandoned the theory as has also Professor Prichard I think.)

not that the immediate object of sense has a certain quality but only that it seems or appears to have such a quality. On that view when we look at a straight stick immersed in water what we perceive directly is not really bent but only looks or seems bent. This would no doubt be the best solution if it could be reconciled with our immediate experience but can it? Clearly what we think we are immediately aware of is not merely something that looks bent but something that is bent. The physical object itself may be straight but surely whatever it is that we directly perceive in that case one fact about it at least is clear from immediate experience namely that it is something bent. Therefore to say that there is nothing really bent but that it only looks or appears bent is not merely to deny that we perceive physical objects as they are but to take the much more serious step of asserting that our immediate experience is itself illusory that we have been quite wrong in the majority of the judgments which we have made as to the data immediately given us for we have held that they were coloured or shaped in a certain way when they were not coloured or shaped in that way but in another way quite different. Further this error is not due to bad inference which we had confused with immediate experience bad inference is certainly not the cause of sensory illusions it is not due to an over hasty and superficial analysis of our experience for however carefully and long we look at the stick we see something that is bent it is not an extraordinary and occasional illusion but an illusion present in some form in at any rate most of our experiences. Most philosophers would hold that we can never be mistaken as to the qualities of what we immediately experience any more than as to the *cogito ergo sum* and although I am not myself sure whether this is always the case and there is no possibility of mistake at all, still we surely cannot admit such widespread illusion and error in our immediate experience as is implied by this theory without plunging ourselves into the abyss of an almost total scepticism. If we doubt the verdict of experience here are we not equally bound to doubt it everywhere?

Two more objections to the theory may be mentioned. In the first place if it were true we should in all cases of illusion have a particular instance of a quality which qualified nothing. It is admitted universally that when I look at the stick I at least perceive the quality bentness and on most other views this bentness qualifies at least a *sensum* if not a physical object.

but on the view we are considering there is nothing really bent for it to qualify. Now I perhaps may be able to apprehend a universal quality which qualifies nothing but here it is not the universal bentness that we are apprehending but a particular instance of bentness.¹ But can there be a particular instance of a quality without the quality qualifying anything?² That seems to contradict the very notion of quality. The theory is still more difficult if secondary qualities are denied physical reality for in that case there is nothing coloured in existence at all.

Secondly the theory seems to break down in the cases of double vision and of hallucinatory sense-data. For in these cases it is not only that an object appears different from what it is but that there is no object to appear at all unless we either postulate a sense datum distinct from any physical thing thus giving us a non direct theory of perception at least in some cases or locate the hallucination etc in the physical world. The only reply to this would seem to be to say that what we perceive in these cases is space (or space time) as a substantival entity appearing to have certain qualities which is a very difficult view to maintain.³

But let us now turn to the main argument for the direct theory of perception. It seems to be that if the direct theory were not true we should be shut up in our own ideas and could have no justification for our belief in the physical world.⁴ Now it is possible that the direct theory of perception may be true but it is quite impossible that this argument could prove it. For either propositions asserting the existence of physical objects can be rightly inferred or seen to be self evident without assuming that we perceive some physical objects directly or

¹ I can only say that this seems to me to be obvious from immediate inspection though it would apparently be denied by the critical realists.

² In answer to my argument it may be replied that the object perceived is a particular and that this is sufficient qualities being in any case universal and not themselves particular. This reply could be accepted if we perceived the qualities as really qualifying the object but then on the view under discussion we do not. Our percept may consist of universal qualities qualifying a particular but not of universal qualities qualifying nothing together with a particular which is as far as we perceive not qualified but only appears to be so.

³ For a criticism of the theory of perception just discussed v Price *Perception*, pp 62-5.

⁴ V c g Alexander *Space Time and Duty* vol II pp 199-200.

they cannot. If they can the argument that we could not attain knowledge of physical objects unless direct perception be a fact falls to the ground. If however they cannot—if as the thinkers in question hold knowledge of physical objects could not be reached or the belief in their existence justified unless we supposed that we directly perceive some such objects then we cannot justifiably assert their existence unless we have first judged that direct perception is a fact and cannot therefore afterwards go on to argue that because we know or rightly believe them to exist the direct theory must be true. Either the belief in physical objects can be justified without first establishing the fact of direct perception in which case the premiss of the argument disappears or it cannot in which case we are trying to prove direct perception from the existence of physical objects and the existence of physical objects from direct perception without having shown that either is a fact. Realists often charge idealists rightly or wrongly with having based their conclusions on the fallacious argument

I want to believe in God

I cannot justify the belief in God unless idealism is true
Therefore idealism is true

I certainly do not admire the logic of this argument if it is indeed used by any idealists but it is no worse than the argument

I want to believe in physical objects

I cannot justify the belief in physical objects unless the direct theory of perception is true

Therefore the direct theory of perception is true¹

This seems to me the straightforward interpretation of the argument in question but I will be charitable and take two other possible ways in which it may be interpreted. It may be meant that we in fact know the existence of some physical objects directly from the beginning and could never reach conclusions as to physical objects by inference if we did not. The direct theory of perception would then be just a reflective

¹ The objection here is not to the appeal to intuitive knowledge which seems a necessary though concealed part of the theory but to the daring assertion that a theory must be true because a certain conclusion can only be established if it is true. If the conclusion is not self-evident it cannot be established by means of premisses the truth of which has not itself been independently established if the conclusion is self-evident we need no premisses from which to prove it.

statement of the fact that we have this knowledge. In that case the argument would escape being a vicious circle because it would be merely an analysis disclosing a knowledge we already possessed merely a statement of the fact that we have direct knowledge of physical objects. But after the distinctions made earlier it is now apparent that this involves a confusion between perception and cognition. To say that we have direct knowledge of anything is not to say that we perceive it directly or *vice versa*. We might have non inferential knowledge of physical objects without perceiving them directly and we might perceive them directly without knowing that we were perceiving physical objects. Hence anyone who took this line of defence would have to maintain that we knew intuitively (or had an intuitive conviction sufficient to justify belief) not only that some physical objects existed but that a direct theory of perception was true. But it has now ceased to be an argument and become an appeal to an unproved intuition which opponents of the theory reject as a mere prejudice.

To pass to another interpretation of the argument it is possible that what it means in the hands of some who employ it is simply that the belief in physical objects cannot be psychologically explained unless we perceive physical objects directly. But even granting that we cannot account for the belief in question by other psychological causes which may be disputed the mere fact if it be a fact, that what we see is sometimes a physical object or part of one could not possibly help to explain the belief psychologically unless in addition to this fact we supposed an intuitive conviction that it is a fact or at least that some physical objects exist. After the exposure of the prevalent confusion between direct cognition and direct perception this ought to be clear. But in that case whether the intuitive conviction was true or false would be quite irrelevant to the psychological explanation of our belief. The belief would be explained just as well if we supposed this conviction to be a mere prejudice due to our innate constitution or to the influence on the evolutionary process of practical needs as if we supposed it to be a genuine veridical intuition. It is a problem in psychology which we are now discussing and therefore the truth or falsehood of our conviction is irrelevant provided the psychological state is the same.

So I see no good reason for accepting the direct theory

of perception¹ Further the adoption of such a view would admittedly involve us in very great difficulties We have either to locate all our percepts in the external physical world just as we perceive them or to differentiate and adopt the representative theory for all except a few favoured ones² The former alternative is one that cannot I think be conclusively refuted but the difficulties involved in it are so great that admittedly nobody would accept it unless he thought that there were very strong reasons against any other view and the reasons that have been given against the representative view seem the reverse of strong A mixed view on the other hand admits the representative theory for most cases of perception and is also intrinsically very unlikely For to quote Professor Broad

- (1) We are asked to believe that in one special position the physical physiological and psychical mechanism produces an utterly different result from that which it produces in all other positions no matter how close to this specially favoured one
(2) There is nothing in the nature of any perceptual situation taken by itself to reveal to us that it differs in this remarkable way from all the rest It would have to be discovered to have this property by comparing it and its objective constituent with other perceptual situations and theirs *

Cases of double vision present a special difficulty for it is very unpalatable to hold that of the two objects seen one is a physical thing and the other a mere sensum though the way in which either eye is affected is precisely the same and would in either case lead to an equally direct perception of the physical object if only that one eye were concerned How could it be the case that when I see a physical thing with my left eye only I perceive it directly but that this direct perception is prevented and replaced by representative perception just because I see the object also with the margin of my right eye? (Or would the advocate of such a mixed view meet the difficulty by maintaining that we may perceive a physical thing directly if we use the middle of either retina but that we never perceive more than a representa-

¹ Another set of objections to the representative view is discussed on p. 287 ff.

² Or to adopt some compromise which even if in some respects an improvement will share in the disadvantages of both alternatives.

* *The Mind and Its Place in Nature* pp. 192-3

tion of it if we use the margin? This would perhaps be the least difficult way of escape)

Another serious objection against both the wholly direct theory and any mixed partly direct theory is constituted by the fact that light has a finite velocity so that if we perceive physical objects directly we perceive a past state which is no longer there and not a present. The circumstance that in most cases the lapse of time is only infinitesimal can not remove such a difficulty of principle. However recent what is seen is still past and therefore not present¹. It seems to me therefore more consistent and reasonable to adopt a full fledged representative theory.

But on the other hand it is very important to admit readily that the advocates of the representative view have in the past commonly committed two very serious errors which made the idealist argument much more plausible than would otherwise have been the case. They have often assumed without any proof that because the immediate objects of perception were not physical objects common to all observers they must therefore be mental. Now if by mental is meant that they are qualities of the mind this statement is clearly false unless we are prepared to maintain that our mind is blue when we look at the sky and round (or elliptical) when we look at a penny. The immediate objects of sense-perception are far from being mental in the sense in which an act of thought or will is so. They have at any rate far more in common with the physical as usually conceived by us than they have with the mental at least apart from their causal properties. They may be causally dependent on us and they may fail to produce the effects that similar physical objects would but in themselves they seem rather to fall on the physical side of the dividing line, as is proved by the fact that any idea which we can form of the concrete qualities of matter must be entirely derived from them. But it would be best provisionally to class them as neither physical nor mental giving them an intermediate position between these two kinds of being. We have no right to assume as a necessary *a priori* truth that everything must fall into one of two classes the physical and the mental. On the other

¹ Similar difficulties could be found in the case of a theory which confined direct perception to perception by touch and did not claim to apply to vision for the physical process of affecting the sense organs and brain must take some time whatever the sense involved.

hand I should agree that it is reasonable to hold our *sensa* to be causally dependent on our mind. It is often said that they can only be shown to be causally dependent on the body but it seems to me clear as it did to Kant that they are subject to synthesis by the mind that they can not be causally explained without admitting the influence or psychological causes and that as they occur when perceived by us they cannot be altogether separated from thought though I should not hold that it is logically impossible for them to exist unthought or unperceived.

It is objected that the admission of *sensa* involves the introduction of a new class of entities of a highly peculiar kind whose relations to physical objects are very difficult to understand and that the production of *sensa* by the mind or body or both together is a very odd kind of causation which is almost creation out of nothing.¹ I agree with Professor Broad that the alternative views are in various ways in as difficult a position themselves which cut away the root of the objection but there is a further point which is often ignored but seems to me greatly to strengthen the representative theory. It is this even if we could deny *sensa* as distinct from external physical entities it is impossible to deny images and therefore in any case we shall have to admit a peculiar class of entities which are neither properly physical nor properly mental. Images resemble *sensa* and physical objects in being extended they cannot be regarded as qualities or states of the mind yet they are not external physical things any more than *sensa*. Images and *sensa* if *sensa* are admitted at all clearly belong to the same class of being they only differ in that the latter stand in a peculiar relation to physical objects. Images are usually fainter than *sensa* but it is impossible to make of this a difference in kind and a really vivid image is as clear as many or perhaps even most *sensa*. True we can almost always distinguish images from *sensa* but however this distinction is effected we cannot point to any difference in qualities between the images and *sensa* themselves to which it is due. Any perceptible quality in *sensa*² may be repeated in images. I know that some realists³ maintain that when

¹ Broad *The Mind and Its Place in Nature* p. 189

² With the possible exception of pain and pleasure but obviously the distinction cannot be based simply on these

³ E.g. Professors Laird and Alexander

we do what is usually described as forming an image we are really apprehending directly¹ the physical thing or past event of which it is an image but this seems incredible to me and still less can I accept the analogous explanation they give of images that do not claim to represent anything in the physical world but seem to be mere imaginations. Further images at any rate if not *sensa* are produced by the mind (or mind body) and therefore even if we had adopted the direct theory of perception we should still have had to admit in the case of images this peculiar kind of causation resembling creation out of nothing. Hence we cannot gain anything in these respects by denying *sensa* unless we are prepared also to deny images. The representative theory does not introduce a new class of entity totally different from any other or a new kind of causation for this has already been admitted by anyone who admits images.

Occam's razor is a valuable instrument but it can only be rightly used to remove entities for the assumption of which there is no good reason and while the representative theory accepts a great multiplicity of entities a purely direct theory such as that of the neo realists has to accept a great many more. After all it is a commonplace that the world does contain an incredibly great variety of things. The physiological apparatus necessary for perception is by general admission extraordinarily complicated so we need not be surprised if perception on the non physiological side also involves much complication.

Advocates of the representative theory have also commonly made the mistake of confusing direct perception with direct cognition and supposing that because we cannot perceive objects directly it necessarily follows that we can have no non inferential cognition of them capable of yielding truth. But more of this later². Here I shall just say that the representative theory would be more correctly expressed as being the view not that we do not perceive physical objects directly but that we do not perceive them directly *in the same sense* as we perceive directly the sensory data (*sensa*) which we use in the perception of physical objects³ and further that

¹ Apparently in the fourth sense of direct awareness (p 268 ff) since the image which we immediately perceive is expressly identified with that event or object (or a part of the same)

² V below p 317 ff

³ I should regard it as correct to say that according to the representative view physical objects or parts of them are not immediately *sensed*

it *may* still be true that we can in a very important sense cognise them directly in and by means of sense perception

One difficult question that arises is whether our immediately perceived sensa and images are or are not situated in a unitary physical space. Here neither alternative is free from grave objections. If they are not in physical space then it seems that we each have a private space of our own in which our sensa are or rather a number of different private spaces one for each sense which gives extended sensa. If they are in physical space there must it would seem be a direct spatial relation between e.g. A's image of Kant and B's auditory sensa or images of words just heard in Cambridge such that one could be say 16 364 598 inches from the other which is also hard to believe. But this can be no objection to the representative theory. For on a partly direct view there will still be some extended sensa¹ and to adopt a completely direct view is not to escape the dilemma but to embrace its second horn. Indeed the direct theory is in a worse position than the representative theory for while the latter can adopt whichever alternative seems better the former is restricted to one the second. Further we should still in any case have to face the same difficulty with images of objects not sensibly perceived at the time or purely fictitious images.

¹ It seems to me inconceivable that sensa could be coloured without being extended though I must admit that such a distinguished philosopher as Professor Kemp Smith maintains the opposite view.

CHAPTER VII

PHYSICAL OBJECTS

§ I THE ARGUMENT FROM COMMON SENSE AND THE ANALYSIS OF PROPOSITIONS ABOUT PHYSICAL OBJECTS

IN the last chapter I have been speaking as though the belief in the existence of independent physical objects in a realist sense were true. My purpose in this was to see whether the representative theory which had such large share in the development of idealism is defensible or not and whether the realist could meet the idealist satisfactorily by merely maintaining a theory of direct perception instead. But it remains for us to try to defend the view (a) that our ordinary statements about physical objects mean what the realist thinks they mean (b) that some of them are true. Against this many thinkers have maintained that what we call physical objects have no existence apart from human (and animal) experience or that while there are things external to us we cannot be justified in saying anything about them except that they produce such and such experiences or better *sensa* when we observe them. The name phenomenism¹ is commonly given to these types of view and I shall adopt this terminology. According to phenomenism any statements purporting to be about physical objects can be true or defensible only if they are translated into statements about human experience.

We shall now turn to the argument which if not *de jure* is at any rate *de facto* by far the strongest obstacle to the acceptance of phenomenism namely what is usually called

¹ Perhaps also that they possess certain formal logical characteristics. It is hardly possible to avoid this admission as Kant found with his things-in-themselves.

² This sense of phenomenism must be carefully distinguished from the sense in which the word is used by Professor Kemp Smit in his commentary on Kant.

the argument from common sense. It is not however very clear what is meant by the assertion that a particular philosophical view is inconsistent with common sense. It might mean that all or most people prior to studying philosophy believe that it is false. But it is impossible for anybody to believe that the view e.g. that there are no physical objects independent of us etc. is false unless the view has occurred to him and been rejected and the views in question have not occurred to the non philosopher. He can not believe them to be false because he has never thought of them. This difficulty might be met by amending our analysis of the assertion in one of two ways. We might say that the statement that a philosophical view is inconsistent with common sense meant that though most people prior to philosophical study may not have heard of the view in question and therefore cannot believe it to be false they hold certain positive beliefs¹ which are in fact logically incompatible with the view. Or we might say that it meant that they would reject the view if it were explained to them in a way which they could understand. I think the statement might stand for either or both of these propositions and I think that in the case of the view under discussion both propositions are in fact true but it is not so clear why the philosopher should be expected to attach much weight in philosophical questions to the opinion of those who have never studied his subject. If those who have studied philosophy see reason to accept a given view why should they reject it just because those who have not studied the subject think it wrong? This would only be a reasonable course if the study of philosophy instead of improving impaired one's capacity for making right philosophical judgments and if so why study it since we could be better philosophers without doing so? But this certainly is not a fair account of the argument from common sense there is more in it than that.

For in the first place it is not the case that views such as phenomenalism seem absurd only to the man who has not studied philosophy. On the contrary in many cases at least the appearance of absurdity is not in the least dispelled by study and familiarity. They still seem indeed difficult

¹ It is clearly possible in a very important sense though one extremely hard to analyse to hold a belief without being able explicitly to formulate it and it is in this wider sense that I speak of a belief as held by common sense.